NORTHROP NEWS

VOLUME XIV

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, August 31, 1955

BBSF Classifieds
(See Page Three)

Going My Way
(See Page Four)

Long Range Interceptor Project Post to Gardner

R. D. "Ray" Gardner, a long-time Engineering division Norcrafter, was named Weapons System project engineer on the long range interceptor program last week.

Gardner's appointment, announced in a bulletin from the office of the chief engineer, Dr. William F. Ballhaus, is the first to be made following receipt of the news that Northrop has been awarded a Phase One study and mock-up contract for a long range interceptor.

Further personnel appointments will be made later, Dr. Ballhaus has disclosed, as organizational requirements are determined following continued close study of project specifications.

Gardner will report directly to the chief engineer, the Engineering division bulletin stated.

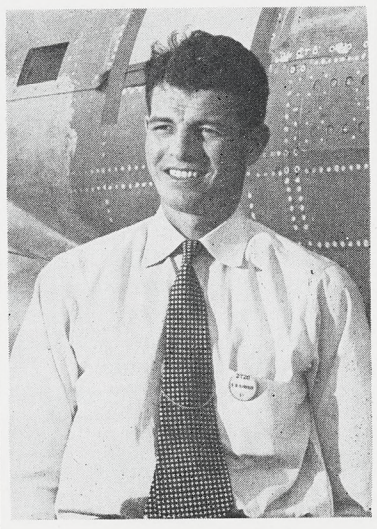
Ray is closely acquainted with the LRI program, having worked as assistant project engineer on the original design submitted in the Air Force competition. He participated in this project until the conclusion of the competition, and followed it up with a six months' study.

Many years of aircraft experience, both at Northrop and in other airframe companies, precede Gardner's new appointment.

An aeronautical engineer and a pilot, as well as licensed professional mechanical engineer, Ray first came to Northrop in May, 1940, working on airframe structural design.

In October, 1942, he left the company for a two-year period. During that time he was project engineer on the C-46, Curtiss airplane being produced by Higgins Aircraft in New Orleans. He returned to Northrop in 1944 and was engaged in a number of projects including the YB-49 and XB-35.

A long and close connection with the F-89 Scorpion followed.



RAY GARDNER

As a lead engineer Gardner helped in the preliminary design phases of the airplane, and went on to handle lead engineer duties on the fuselage structure of the airplane.

Working out of the project office, Ray was project coordinator on the YF-89D, coordinating the activities of all departments concerned with the engineering and production of that aircraft. The "D" made its first flight six weeks ahead of schedule in October, 1951.

More recently, the LRI studies, as well as assistant project engineer duties on the N-125 project and work with sub-contract activities, have kept Gardner well informed with the latest developments in modern aircraft concepts.

On the more personal side, Ray lives in Rolling Hills with his wife, Joan, and two children —Lina Rae, 13, and Dave, 10. He serves as cubmaster of Cub Scouts and as president of the Little League in the community.

He has been a member of the IAS for close to 20 years, and, closer to home, has held elective, as well as appointive, offices in the Northrop Management Club.

Extra-Long Weekend for Norcrafters

Norcrafters in all plants will enjoy their annual long weekend in observance of Labor Day.

Next Monday, September 5, will be a holiday for personnel. All hourly-rated personnel not on leave of absence will receive eight hours' straight time pay for the day; part-time Norcrafters get straight time pay based on their regular daily schedules.

Hourly-rated personnel on vacation, the announcement from Industrial Relations division explained, get an extra day's pay to compensate for the holiday.

Straight time pay plus holiday pay will go to hourly personnel requested to work on Monday. The day is considered as time worked for purposes of computing overtime.

Northrop Contribution To Rapid Data Studies

Another contribution to the advance of data reduction has been made by the Computer Services department of the Engineering division.

The department recently completed testing a new scanner-reader—first of its kind—which has been sent to Redstone Arsenal to become part of a semi-automatic data reduction system.

Operation of the new system will speed up reading and plotting of test data, Lee Ohlinger, chief of Computer Services, states; but perhaps its greatest advantage is that it will minimize the possibility of human error in the reduction of data.

Ohlinger explained the general system of reducing data as follows:

Information from a test airplane, for example, comes in on oscillograph tape. From this information engineers may request that some particular data be extracted, corrected for instrument calibration, and reduced.

To read the information on the tape, the latter is run into the scanner-reader, which automatically reads x and y coordinates of the desired curved traces at the rate of 600 points per minute. A photo-electric diode measures the required information from the lines on the tape and transmits this data to an IBM card punch.

(This measurement was formerly performed by personnel who literally measured the distance between lines; it was here that so much time was consumed, and where errors could creep in).

The information extracted in this automatic manner is relayed, in punch card form, to a digital

(*Continued on Page 2*)

QUALITY PROGRESS

DATA FEED-BACK PROGRAM DRAWS AF STUDY

The outstanding progress of Northrop Quality Control in the field of objective quality evidence was subject to detailed review earlier this month by an Air Force representative from Wright Air Development Center.

Donald C. Flischel, of the Plans Division, Quality Control, Headquarters, AMC, surveyed the Northrop program at the behest of Colonel M. C. Brennan, chief of the Plans Division, who had visited Northrop earlier.

The data feed-back value of the system was especially under study for its general interest to the Air Force and other airframe companies. (The subject has been high on the agenda of technical discussions throughout the country).

Generally, the unique Northrop QC program tries to assure quality all along the line from the engineer's drawing board to operational maintenance. It accumulates data into easily readable form for quick study, providing for instant, timely, corrective action.

Three basic phases mark the program.

First phase deals directly with product difficulties preparatory to flight, in flight, and post-flight.

The second—existing independently of the former, but in conjunction with it—is a Functional Equipment Withholding System. This is closely allied to —and will be increasingly integrated with—the USAF Product Improvement Program.

And the third, culminating phase of the valuable data feed-back program is the Quality Evidence Record folder.

All three combine to form a realistic, understandable, unbiased system of reporting quality, which becomes of inestimable value in anticipating difficulties and remedying them.

The further result? A reliable, reasonably-maintained product produced at a minimum cost; for all facets of the engineering-production-inspection team are involved.

The flight difficulty reporting system was first introduced by QC Director Bob Catlin in November, 1954, at a midwest conference of the American Society for Quality Control. (The report was since re-printed in American Aviation and Western Aviation magazines. The system was characterized as the optimum measurement of engineering, manufacturing, and inspection job performance.)

It uses four reproduced vellum forms to collect flight information.

One form summarizes squawks which require removal and replacement of airborne units, such as navigation receivers.

A second summarizes those squawks and fixes requiring no removal of equipment from the aircraft.

The third is a historical record of complex systems, like fire control.

The fourth—summarizing data contained in the other three—is the "action" paper. It measures percentage of flights affected by each airborne system or unit, and it warns management of excessive difficulties in flight operations, inspiring immediate corrective action.

The Functional Equipment Withholding System—second of the basic phases — provides source data for the summaries above.

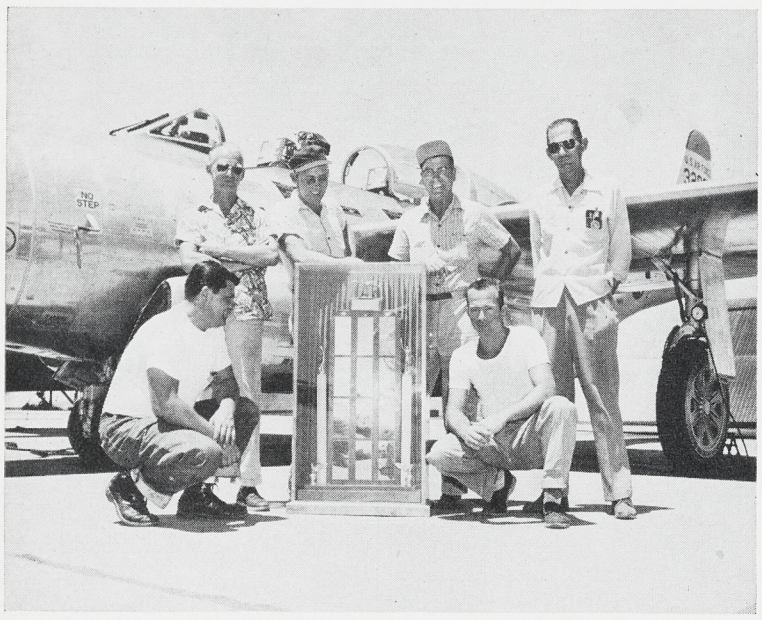
Withholding tags themselves are tabulating cards. Data is recorded directly on them, rather than transferred from another paper. The cards can then be run through tab equipment for rapid accumulation of data to show repetitive conditions as well as isolated malfunctions.

The system serves as an overall audit of functional equipment quality, and

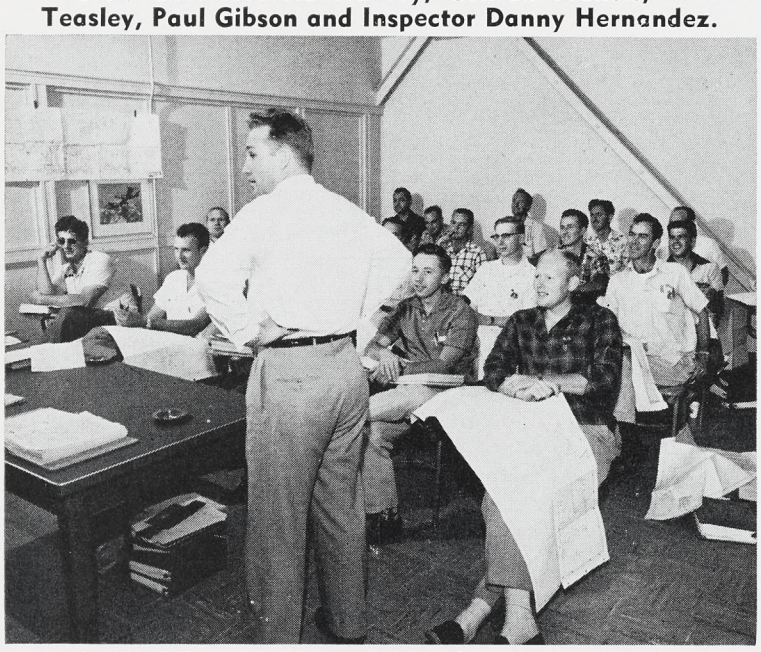
(*Continued on Page 2*)

DATA FEED-BACK value of Northrop objective quality evidence program recently attracted attention of Air Force, who sent representative to review the system. He is Donald Flischel, seated center, from Wright Air Development Center. Explaining program to him are John Boscon, AF Quality Control at Northrop (left); R. S. "Bob" Catlin, director of Northrop Quality Control (right); and E. C. "Bud" Bennett, Statistical Quality Control, standing. Program was related earlier to ASQC at midwest conference by Catlin (for details, see story beginning above).

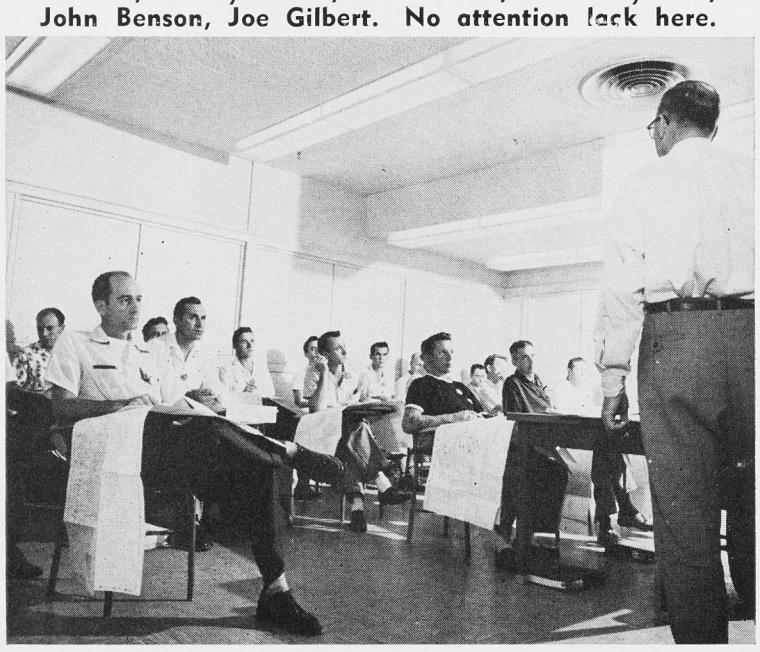
Palmdale Section



TROPHY BIG ENOUGH for year of Flight Crew Achievement Awards is this one, glass case and all, out on Palmdale Scorpion ramp for pic of June winners. Day and night crewmen together earned honor, though only day men are shown—Anthony Serrone, Gene Hecker, Crew Chief Gordon Stevens, Frank Hollaway, Inspector Andy Anderson and Ed Harris. Night crewmen with names also inscribed in June spot —Crew Chief Harold Hawley, Conrad Francis, Will Teasley, Paul Gibson and Inspector Danny Hernandez.



PALMDALE FIRE CONTROL classes, recently pictured, have since moved to sharp, new classrooms just finished on third floor. Here, instructed by Lee Moulton, is new set of Norcrafters—some shown, others not—in one of classes: Lyle Perkins, Glen Spooner, Robert Williams, John Stapp, Loren Danel, George Stewart, jr., Gerald Hardy, E. J. Comerford, Robert Houston, Stanley Webb, Harold Akers, Gordon Schumacker, Daniel Richie, R. J. Gross, Joe Riemier, Nick Mackos, Wesley Purtee, Fred Russell, David Reynolds, John Benson, Joe Gilbert. No attention lack here.



MEANWHILE, in adjacent classroom, student neighbors to those shown above, instructed by L. J. Wilson, include—Robert Griffith, jr., Jim Roberts, Charles Sammann, Edwin Buentgen, Bob Morgan, Ronald Goodman, Bob Atkin, Dave Abercromby, L. E. Edwards, J. A. Szarkowski, Paul Tisor, Monty Babcock, Bill Curlee, Glenn Bulman, Joeseph Gilbert, jr., Myron Peck, Jake Jacobson, Robert Norder and George Sullivan. Classes are well-lighted, clean, and pleasant.

Down---Range

Two night courses in aviation safety and aircraft accident investigation will be presented at the University of Southern California beginning September 19, USC's News Bureau reports . . . Course in latter subject will be taught Tuesdays from 7 to 9:40 p.m. by Frank G. Andrews, formerly with AF, CAA and CAB . . . Monday night classes (7 to 9:40 p.m.) under William W. Grings will explore human factors in aircraft design.

Vern B. Ward, Ontario Empennage Assembly, and wife Edith marked happy event on August 22—forty-first wedding anniversary . . . To celebrate event, Wards planned week-end pleasure trip to San Diego and environs, including visit to Balboa Park and fishing off Coronado . . . Son Everett and daughter Margie Larson joined friends in extending felicitations . . .

Norcrafter Harry Mitchell, currently on sick leave from Plant Security and Protection, was subject of recent Los Angeles Times feature . . . Story told of amazing heart operation performed on Mitchell—11-hour operation in which segment of aorta was grafted into Mitchell's heart . . . Article expressed belief that operation may not have been duplicated successfully elsewhere in world.

Quality

(Continued from Page 1)

directs specific corrective action accurately to trouble areas.

The third phase—Quality Evidence Record folder—directs the collection of historical data in fine detail at the assembly or bench test level. It ties the work to the man who did it; by emphasizing potential pitfalls, it shows him where he can prevent errors.

The folder provides corrective action data for follow-up; gives parts quality records; and serves as a basis for one phase of the interesting quality rating system in effect here.

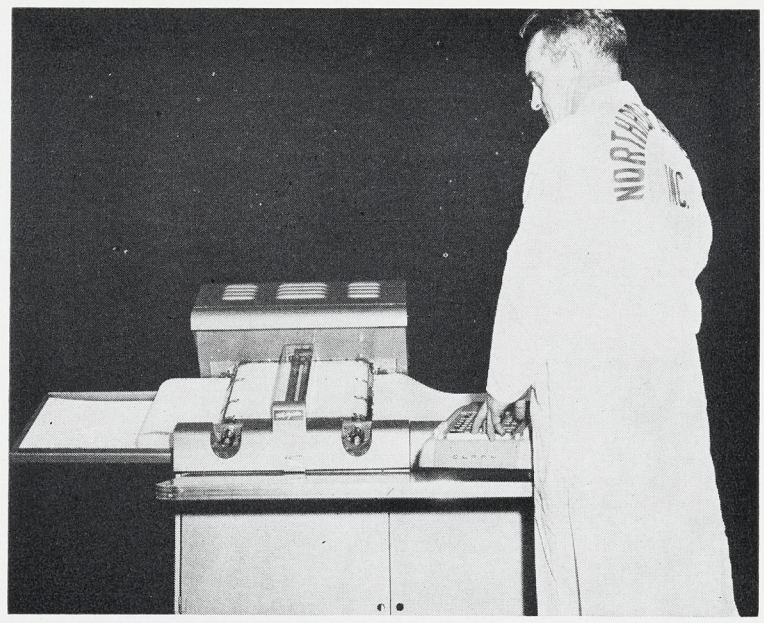
The rating system classifies every inspection item according to its importance in the completed product, and every out-of-line condition in relation to its probable effect on the inspection item.

A code of values encourages the report of discrepancies in early stages of production by both production and inspection personnel, decreasing the possibility of serious error in advanced stages.

The workability of the entire data feedback, or objective quality evidence, program has been due to outstanding cooperation between QC and Manufacturing Norcrafters, with assistance forthcoming whenever necessary from AF Quality Control personnel in the Northrop AFPR office.

Representatives of all three of these groups met with Flischel.

"The rapid strides being made by Quality Control," Flischel stated, "are of mutual interest to both Northrop and the Air Force, since they are largely responsible for the cost and quality of aircraft for our national defense."



COMPUTER SERVICES Norcrafter Joe Brell operates Tally-Northrop high speed digital plotter manually in scene shown. Equipment plots points of data directly to paper, working simultaneously on several curves, if necessary. Development has speeded up transmission of data, with accompanying accuracy.

Northrop Contribution

(Continued from Page 1)

computer, which calibrates and reduces the raw data. Normally then, personnel would plot the curves from this printed information—but the new system feeds it directly to a plotter which automatically does the job at the rate of 500 to 1000 points per minute.

The plotter is a joint development of the Tally Register Company and Northrop. It plots points of data directly on paper, working on several curves simultaneously, if necessary.

For example, the plotter can handle velocity, stress, and other desired factors against the common denominator of time.

The plotted data goes to the engineer for study, either to substantiate earlier design or test procedure, or to effect a change in them.

The effect, of course, is mirrored later in production—and the faster the raw information can be processed for the engineer, the faster production personnel can be advised to be ready for probable changes.

The high speed reduction process also has still another advantage—copies can be easily run off and included in the printed report of studies. The plotting can go on for miles, Ohlinger says—or as long as the tape holds out!

The development, started from scratch about a year ago, was completed mostly in Computer Services, with some shop work from Hawthorne departments.

Don Hannum, supervisor of Computing Machine Services, directed the project, with W. J. Brell and Graham Tyson as group leaders. Working with them were Don Segel, Jim Spring, Steve Zemba, Gray Lange, and George Delaney, all of Department 3330.

HIGH SPEED digital plotter is connected to IBM Card-Programmed Calculator, which receives information and runs it into tab form. Don Hannum, of Computer Services, stands to left of plotter. The semi-automatic data reduction system was built by Northrop for Redstone Arsenal, was recently shipped there.

Northrop News

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News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline—Wednesday before publication.

FOR SALE

TIRES, w/w, and TUBES, 6.70x15, plenty miles left, Goodyear, both for $10. PL 4-4384 or PL 5-8040 (neighbor). A

CONVERTIBLE PILLOW MACHINE, used very little, $75; Singer sewing POWER MACHINE, model 31-35, $75; stand and extra 31-15 power machine HEAD, $40; reconditioned TRAILER COUCH, newly covered with two-tone cloth, $35; Kenmore upright VACUUM CLEANER, $7; Cadillac drum type SWEEPER, $10. L. SHEPHERD, NE 2-9208. A

SINGLE BED, maple, with box springs & mattress, excellent condition, $50; steel WORK BENCH, heavy gauge, 32" wide, 6' long, $25; STENOTYPE MACHINE, $35. PARKS, OR 7-4996. A

HOUSES, two, on large lot, G. I. appraised, front house two bedroom, rear house one bedroom and less than 2 yrs. old. Both houses vacant, front house newly decorated. OS 6-9792. A

HOUSE, large 3 bedroom stucco, corner lot, fenced back yard, curbs, sidewalks & sewers, $650 down, $70.00 per month. MARY L. COBURN. Write to Northrop News, Box 117. A

TABLES, 3 mahogany, exc. cond., leather and glass tops, 1 coffee, 2 end tables, $75 for all or sell separately; 1 double size MATTRESS, excellent condition, used 2 yrs., $19. MAX STERN, DA 4-6748. A

HUDSON, 1950, Pacemaker, jack & spare tire included, $250. OR 7-5576. A

BOAT, 15' Fiberglass Performer, windshield, front steering wheel, remote controls, 1954 Evinrude 25 h.p. motor, trailer, almost new. SHIRLEY JOHNSON, TO 9-6795 anytime. A

OFFENHAUSER HEAD, '49-'50 Ford and Merc., 8-1 compression, must sell, never used, $45. LOUIS STEINMETZ, PL 4-7117. A

PISTOL, "30" Mauser (7.63 mm) semi-auto., German, second most powerful hand gun in the world, very good condition, needs blue, $50. NORMAN H. COLLINS, TO 1-4038. A

SINK, like new, 18"x32" deck type double with rim, $40. PL 4-6146 after 6:00 p.m. A

FURNITURE, 4 rooms, was bought new 6 weeks ago, cost $785, will sell all for $450. Take over payments, all clean furniture. Write to Northrop News, Box 114.

CHEVROLET, 1938, 1947 motor, $50. OS 5-2700. A

HOUSE, 3 bdrm., large lot, Costa Mesa, 5 minutes to Balboa Bay, 1 yr. old, carpets, ocean view, must sell before Oct. 1, occupancy Oct. 8, $10,000, $2,700 down, $61.50 mo., or will carry $2,000 second. W. A. HARBERT, LI 8-1472. A

KITTENS, Seal Point Siamese, 3 males, 1 female, $15 ea. S. S. HOPWOOD, GL 4-2855 after 4 p.m. A

STUDEBAKER, 1951, Landcruiser sedan, $595. W. J. DANKOWSKI. Write to Northrop News, Box 106. A

SERVEL REFRIGERATOR, double door, 2 cubic foot freezer compartment, nine months old, cost over $500, $395; Magic Chef GAS RANGE, $50. FR 4-6640. A

WIRE RECORDER, Webcor, never used, complete, including spool of wire, sacrifice. $65. JOE DAWSON. Write to Northrop News, Box 105. A

WATERLESS ALUMINUM set, most of the pans have never been used. Reasonable. R. A. NELSON, DA 9-3702. A

BREVI-TYPE MACHINE, complete with carrying case, instructions and lessons, $25. HARRY J. BLACY, JR., FR 2-9794. A

PLYMOUTH 1950, 2 dr. sedan, $395. JACK NATION. Write to Northrop News, Box 103. A

HUDSON, 1946, $80. J. A. PISETTI, OS 5-6827. A

CAMERA, 35mm Mercury II, flash, and leather case, good condition, best offer. B. LANGFORD, OR 7-5737. A

RUGS, 2, wool braided, 6'x9' & 9'x12', $40; 2 maple Captain's CHAIRS, $15 ea.; BED DAVENPORT and chair, $50; BABY BUTLER, $25. EDITH MARSHALL, OR. 1-3982. A

HOUSE, GI financed, 3 bedroom, double garage, near grade and high schools, $12,500, $2,500 down. C. W. DABBS. Write to Northrop News, Box 102. A

WASHING MACHINE, ABC wringer with pump, $35, or make offer. BEVERLY T. RAICHE. Write to Northrop News, Box 101. A

SEWING MACHINE, treadle type, White, with electric motor, $10. FR 4-3253. A

LOT, R-1, Palmdale, 68'x124', low down, low monthly payments. FRANK PIWOWARSKI, NE 5-9239. A

FOR SALE

PONTIAC, 1952, Catalina, Hydra-Matic, $1195. LUIGI CAPPELLI. OR 4-4605. A

AQUA LUNG, 1 hr. tank and regulator with safety device, used 6 times, $100; "SHOPMASTER" saw, 3-horse, reversible motor, all attachments, new condition, $165; 8" electric SAW, like new, $60; 6 DOORS, interior, 30", $1.00 ea.; LAVATORY, $5; Trailer REAR END, $5. ED McGOVERN, OS 5-7414. A

CRIB, baby's Storkline, spring, Kant-Wet mattress, good condition and one Jiffy TRAINING SEAT, $22.50. DA 4-0335. A

MERCURY, '49, convertible, overdrive, $600. HAZEL WINTERS, EX 9-3897. A

LOTS, ¾ acre, near Palmdale, $1250, small down, small payments. McCLEAN, CR 6-6326. A

PUPPIES, A. K. C. registered, cocker spaniel. FR 4-2728 or DA 4-7961. A

TYPEWRITER, Oliver, $10; MANDOLIN, $10; double WAFFLE IRON, $4; single WAFFLE IRON, $2.50; VICTROLA, $5; TOASTER, $1; VIOLIN; BANJO; Steam O'Matic IRON, $5; SANDWICH MAKER, $3.50. J. H. BUSH, OS 6-6449. A

T. V., 12½" Hoffman, blonde cabinet, $50. DA 9-7343. A

RIFLE, Mossberg .22 caliber, model 151 M-B semi-auto, stock fed, peep-sight, holds 18 l.r., good cond., $30; 1951 STUDEBAKER 2-door sedan, list for $615, $500. WE 3-2620. A

ORIENTAL RUNNER, Hamadan, 18 feet by 39 inches, clean, good condition, predominantly dark red and blue, $85. REED P. BERRY, AX 3-5986. A

CAMERA, 2¼ x 2¼ with flash, F 2.9 Schneider lens, Prontor II shutter, good condition, $20. GEORGE D. HILL, OR 4-3499. A

FORD, 1951 Fordor Deluxe, overdrive, $595. W. DEDON, EX 4-1982. A

TRUMPET, good condition, case fair, $15. G. J. GRUMMER, L. B. 4-04370. A

PLYMOUTH, '47, back seat speaker, $300 or best offer. HENRY CHOW. Write to Northrop News, Box 113. A

DINETTE TABLE, 4 chairs, gray, table top walnut finish, complete with 2 leaves and table pad, custom made, set $30; Axminster 12'x15' figured RUG, $45; 8x10 gray RUG, $20; maple TWIN BED SET, complete with mattresses and box springs; 1 maple DINETTE TABLE, 4 chairs; 9x12 oval HOOKED RUG. Reasonable. G. A. NORTHRUP, AX 2-1793. A

FORD, '48, club coupe, $75. H. J. CRIMMINS, TE 5-2216. A

WATER SOFTENER, used, large, good, Consolidated make, $200. M. C. SMITH, FR 4-3816. A

FORD, 1951 V8 Tudor, $600. W. MORRIS, OS 5-3121. A

UNITS, private owner will sell with small down to reliable party, almost new 3 one bdrm. units, modern features, El Segundo, principals only. Will also lease apt. WE 1-5722. A

DEER RIFLE, 30-06 Enfield cut down to sporting rifle, one half buckhorn sights with raised front sight, $75. CECIL HARRIS, FA 8-2604. A

CHEVROLET, 1940, 2-door sedan, $100. M. J. FAYRWEATHER, AX 1-9010. A

OUTBOARD MOTOR, 12 hp. Sea King, run less than ten hours, $150. PAUL E. FORD. Write to Northrop News, Box 108.

CHEVROLET, 1954, 4-door dlxe., Powerglide, take $200 for equity and take over payments. VINCENT M. GEIGER. Write to Northrop News, Box 107. A

FORD, '51, 2-door, $400, terms. NO 1-1464. A

STOVE, table top, 42", good broiler, $75; STOVE, Roper, $35; PIANO, medium upright, Everett, good tone, $225, rosewood. ALEX C. RUZINSKY, AX 3-8971. A

OLDSMOBILE, '42, 6, Hydra-Matic, $60. M. C. BROWN, OS 6-5830. A

HOME, 3 bedrooms, carpeted throughout, thermo controlled heat, breakfast area in kitchen. 50'x120' lot, Westchester, $14,750. DAN PECK. OR 7-0078. A

MATTRESS, full sized innerspring, box spring, frame, used very little, $35. W. E. AHLBERG, OS 5-3881. A

SOFA AND CHAIR, rose, make offer; chrome BREAKFAST SET, blue, $15; LAWNMOWER, good condition, $12. D. A. MOORE, DA 9-2428.

HOUSE TRAILER, 1954 Eastern built, 35', 2 bedroom, shower, toilet, small down, balance like rent to responsible party. Write to Northrop News, Box 109. A

BICYCLE, girl's, full size, $15. OS 5-2566 before 4:00 p.m. A

LEVEL LOT, choice area, in Palos Verdes, $8450. D. R. SMITH, GR 8-6392. A

Symbol of Saving
MAT CON

FOR SALE

CHEVROLET, '41 2-door, $125 cash; Remington model 5 portable TYPEWRITER with case, excellent condition, $45 cash. E. W. GAUNT, OR 1-5192. A

TRAILER, tear drop, metal, custom built, double bed, stove, ice box, spare wheel, water tank, lean-to tent, $185. E. H. KRUEGER, PL 8-7750. A

GRAHAM, 2—'41 Graham Hollywood sedans, both in state of disassembly, can be built into one, both $30. W. I. WORRALL. Write to Northrop News, Box 111. A

BUICK, 1941 with 1948 motor, best offer. VINCENT CALABRO, FR 2-4510. A

HOUSE, 3-bedroom, double garage, large lot, So. Redondo, near public school and shopping district, $13,500. F. W. D'ATRI, FR 5-6451. A

CONVERTIBLE, '49 Lincoln, overdrive, $500. R. S. REEVES, FR 4-5227. A

FURNITURE, pictures, davenport, chair, lamp; STOVE; automatic WASHING MACHINE, Kenmore, good condition. Write to Northrop News, Box 110. A

ELECTRIC RANGE, Crosley, automatic, double oven; size 9 MATERNITY CLOTHES. R. SNYDER, OR 2-7530. A

MAPLE FLOORING, approx. 1250 sq. ft. 13/16, $150. N. J. BREYER, OS 5-4054. A

CADILLAC, 1949 "62" 4 dr. sed., GMAC terms or 1100 dn., $800. J. J. LA BIANCO, FR 4-9106. A

IN-A-VENT FAN, model 222A, never been out of box, cheap. O. H. BEATY, PL 9-1443. A

REFRIGERATOR, 6 cu. ft. Servel, $55. R. G. ECHLES. OR 1-5046. A

HOT WATER HEATER, 30 gallon electric, good condition, $5 full price; 1 horsepower electric DEEP WELL PUMP with 30 gallon pressure tank, complete outfit, $50; corner WASH BASIN, $1; BRASS TRAP for same, $1; eight SKY HOOKS for painting, 50c each. JOHN A. CABLE, FR 2-0149. A

REFRIGERATOR, 7.6 cubic foot Frigidaire, like new, guarantee, $100. FR 9-8726 after 9 p.m. A

CAMERA, 35mm Kodak with coupled rangefinder, 3.5 lens, deluxe Eveready case, excellent cond., $30. Write to Northrop News, Box 112. A

FORD, 1934, 3-window coupe, '41 Mercury engine, '47 Ford steering, need transmission, $75. ROBERT LUNDIN. Write to Northrop News, Box 118. A

FORD, 1941 coupe, V-8 motor, dual carburetion, $150. W. McEWEN. Write to Northrop News, Box 119. A

DOG, male Boxer, pure breed, 6 months, earcrop, all shots, good with children, housebroken, $50 or best offer. MARY WILKES, FR 9-9765. A

LAND, 1 1/10 acres, level, near Riverside, low down and monthly payment. LEO DAY. Write to Northrop News, Box 130. A

FORD, 1953 V-8 Victoria, Ford-o-matic. DAvis 4-0930. A

DINING SET, hardrock maple, 9 pieces including hutch and corner cupboard, $275; antique DESK, $25; RADIO-RECORD PLAYER; BOOKCASE; IRONER, Thor Gladiron; LAMPS, etc. Make offer. R. B. JACKMAN, FR 5-6095. A

SAXOPHONE, E-flat alto, like new. TED R. NICHOLAS, OS 6-4209. A

SURF BOARD, Simmons' former personal board, $45. CAROL JOHNSON, CR 6-6926. A

SAND BOX, with canopy, $7; HIGH-CHAIR, $5; BABY BEDS, $5 and $8; child's toilet SEAT, 50c; Hanson bathroom SCALE, $250; 7 cu. ft. REFRIGERATOR, $40; 2-compartment SINK, restaurant use, $5; galvanized hood VENTILATOR $5; 24-ft. COUNTER, Formica top, and 12 leather upholstered STOOLS, $40; 20-gal. gas hot water HEATER, $10. LILLY T. BEST, PL 5-4459. A

CHEVROLET, '33 coupe, '34 engine, not running, needs timing work, $15. OR 7-3662. A

BICYCLE, boys' 26", Schwinn lightweight. PL 2-9597. A

CHEVROLET, 1940, sedan, PL 4-1458 A

RANGE, Westinghouse deluxe, fully automatic, electric, 2½ years old, $150; 4' x 8' BOX TRAILER with 12' x 16' tarp, two new 7.00 x 15 tires with safety tubes, $100; Proto WRENCHES, sizes 1 5/16" - 1 7/16" - 1⅛" - 1⅝", open and box ends, cost $35; sell for $15. JIM DRIVER, OR 4-3262. A

MUSICAL BOX, antique, about 2½' long, 14" wide, and 10" deep, bought in England, $800. JAMES LAYMAN, OS 6-7482. A

TONNEAU AND TIRE COVER, $20. LARRY DON VITO, LU 1-3995.

FORD, 1947 tudor, special deluxe, DON BULL, FR 4-1152. A

SKIS, hickory, 6'9" long, ski-free binding, aluminum poles, ski shoes, size 8; SKI PANTS, size 30 (S), $50, sell all or part. JIM ZEPEDE, OR 2-8474. A

TRAILER WHEELS, two 14", tubes, tires, hub caps, complete. $4 each. MARGARET BORTNER, PL 5-4759. A

GARAGE DOOR, single, with hardware, $12.50. JAMES D. MURPHREE, OS 6-6686. A

WATER PUMP, gasoline-driven, Jaguar, two-inch capacity, $30, complete. H. F. STARKEL, PL 4-4374. Call 10 a.m. to 4 p.m. A

SPEEDBOAT 20', 6'6" beam, mahogany planking, 125 h.p. Grey marine engine, trailer and cover. $1545 complete. OR 2-7324. A

FOR SALE

TYPEWRITER, L. C. Smith Secretarial, reconditioned, like new, $50; DRAFTING MACHINE, perfect condition, $45; LAMP, floor standard, with shade, nearly new, $8. FR 2-1076. A

DINING ROOM SET, 8-piece Spanish type, oak. Best offer over $135. S. J. DORNBURG, FR 9-5532. A

CAMPING TRAILER, folding, sleeps 4, has icebox, $200. TED KELLY, DU 8-4082.

MERCURY, 1949, 2 door sports coupe, overdrive, $550 or best offer; 1941 STUDEBAKER, overdrive $100 or best offer. FRED W. HARRAH. Write to Northrop News, Box 126. A

CHEVROLET, 1946 four-door Fleetline sedan, $250. R. F. FUNDER, OR 7-8775.

CHEVROLET, 1950 4-door, $550. D. E. KAEDING. Write to Northrop News, Box 125. A

CHEVROLET, 1946 deluxe coupe, new battery, brake lining, $195 cash. DA 6-5897. A

PORTO-POWER, Black Hawk, deluxe, complete, $325; other GARAGE EQUIPMENT. MARY A. ZALESNY, OR 1-2708.

DEER RIFLE, Winchester, model 70, 1 year old, shot very few times, $100 or make offer. OS 5-3557.

LUGGAGE RACK, wire mesh, $10; 1 pair men's white SHOE SKATES, size 8, $8; 1 pair men's SKI BOOTS, Molitor, size 8½, $27.50; 1 pair men's SKI BOOTS, Balley, size 8, $20; assorted CABLE BINDINGS and edges; 1950 Mercury MUFFLER, never used, $5; Argus C-4 CAMERA, case and flash-gun, $60; Argus CAMERA BOOK, $2. C. J. GILBERT, FR 9-9553. A

HOLLYWOOD BED COVERLET and dust ruffle, three pillow shams, maroon with stripe trim, excellent condition, $20. T. E. FLANNIGAN, OR 2-3870. A

SPEEDBOAT, 17' mahogany runabout and trailer, inboard Mercury full marine conversion motor, A-1 condition, $1200. T. F. BREWER, NE 2-6441. A

PONTIAC, 1946 sport coupe, $260 cash. FORREST E. SHANKS, WI 7-2820. A

PLYMOUTH, 1952 coupe, overdrive, best offer takes; man's WRIST WATCH, Benrus auto wind, never worn; 12' PADDLE BOARD; 1 set of DOUBLE SPRINGS; 1 set SINGLE SPRINGS; STOVE and other USED FURNITURE; best offer. RICHARD CLARK PL 8-9569. A

CRUISER, 16', trailer, bait tank, motor, complete $500. FR 2-4673. A

WASHING MACHINE, ABC Town and Country, $25; WATER SOFTENER, $75; Salem maple COFFEE TABLE and 2 matching END TABLES, $30. ELSIE TOBER, TO 2-3509, after 6 p.m. A

BOX TRAILER, 2 wheel steel bottom, $50; 130 ft., 4½ foot high, PICKET FENCE, 50c a foot; Craftsman METAL LATHE 4 ft. bed, 3 and 4 jaw chucks, 5/8 Jacobs chuck, $300; drum and disk POWER SANDER, motor and cabinet, $50; CEMENT MIXER, ½ bag Sears $50. ADOLPH TOBER, DA 4-4046, before 3 p.m. A

CHEVROLET, 2 door sedan, 1938, 1947 motor, $45. J. C. HAGGARTY, OS 5-5850. A

MOTORCYCLE, '46 Harley Davidson, chopped, pipes, 19" front wheel, $320. FRED MINER, OR 7-9309. A

COLLIER'S ENCYCLOPEDIA AND HARVARD CLASSICS, full set never unpacked, cost $300, $150. DOVIE WILLIAMSON, TO 3-3075. A

COASTER, children's Flexee, good condition, $8; pair of HOMING PIGEONS, $1.50 per pair. SHIRLEY HALL, EA 2-4569. A

ELECTRIC MOTORS, G.E. ¼ h.p., $10; Norge 1/6 hp, $8. WILLARD H. BOLTON, OS 6-0806. A

LIVING ROOM FURNITURE, green divan and matching chair, occasional rocker, 2 end-tables, 1 coffee-table, 2 lamps, $100. WILMA AST, OS 5-2293. A

PIANO, cut down Gulbransen, completely done over, mahogany finish, very good condition. $265. M. A. LEMOINE, OR 4-1097, after 4:30 p.m. A

HOUSE TRAILER, 27' '42 model, 8-cu. ft. refrigerator, new bed davenport, newly painted exterior, $650. SELMA OLSON. Write to Northrop News, Box 129. A

FORD, 1946 convertible. Best offer over $175. JAMES G. LAYMAN, OS 6-7482. A

ENGINE, 1938 Ford V-8, complete with heads and pan, $20. C. A. RICHARDSON, TEX 4-4719. A

FORD, 1950 deluxe 4-door, overdrive, low priced. D. D. SIKORSKI OS 6-3110.

CHILDREN'S GYM SET, two swings, glide seats, rings, etc., three weeks old, original price, $30, $20. DON SHERMAN, FR 4-1773. A

COMBINATION WIRE RECORDER, record player and radio, portable, excellent condition, built by Pentron Corp., extra reels of wire included, $75. E. D. GRIFFIN, PL 2-8811. A

ELECTRIC WINDOW, operating kit, Trico, for 2-doors, kit never used, fits '49 thru '52 Ford or Mercury, $20. BILL CICERONE, PL 2-9486. A

FORD, 1949 V-8, 5 passenger coupe, $600 custom work done, $500. BILL DRUMMOND, OR 1-6048. A

BOX SPRINGS AND MATTRESS, like new, $10. DOUGLAS A. MOORE, DA 9-2428.

BUICK, 1953 special 4-door sedan, Dynaflow, $1350. J. LESLIE WALLING, DA 9-3669. A

FORD, 1954, convertible, V-8 engine, $1900. OR 2-8405. A

FOR SALE

MOTORCYCLE, 1950 Harley No. 74 OVH, $350. JACK ALLEN, OS 5-1850. A

BEAVER COAT, $500, ladies, size 10, ¾ length, excellent condition, will consider any reasonable offer. T. REYNOLDS, VE 8-4918. A

BED DAVENPORT, large size and matching chair, $30; OCCASIONAL CHAIR, $10; several pairs DRAPES, $1.50 pair. W. H. SCHMIDT, PL 5-3365. A

ELECTRIC RAZOR, Sunbeam Shavemaster, model W, excellent condition, including new head, cutter and plastic carrying case, $15. R. H. SPRINGER. Write to Northrop News, Box 127. A

TOY POMERANIAN, black male, AKC registered, 3 months old, $60. OS 6-1607 or DA 9-5760. A

EQUITY, $500 equity in 27 ft. Streamlite house trailer for $300 and take over payments of $44.02 per mo. C. E. BURRIS, WI 7-5360. M

WANTED TO BUY

LOTS or ACREAGE, in or near L. A. county or city. Write to Northrop News, Box 115. B

LETTERING SET, Le Roy, complete or partial set, templates 200C to 2000C, pens #3 to #14, and adjustable and fixed scriber. JOHN V. PUGH, OR 2-8875 B

NASH, '49-'50, condition no object. TE 4-7420. B

TWIN STROLLER; BABY CRIB, natural wood only; good condition, reasonable. PL 2-2770. B

DRILL PRESS; WOOD LATHE; JIG SAW; ¾ HP. MOTOR; 1/3 HP. MOTOR. C. E. WHITE, OS 6-0870 after 5 p.m. B

SPOTTING SCOPE, used; wool braided RUG, 8'x10', used; Simmons HIDE-A-BED; GAS LOGS for fireplace—all items good condition and reasonable; GREENHOUSE, used, good condition, approx. 12'x15', portable reasonable. S. HOPWOOD. GL 4-2855 after 4 p.m. B

TARP, water-proof, mildew-proof, approx. 25'x25'. ELAINE KORTZ, FA 8-3423. B

CAMP STOVE, butane; COLEMAN LANTERN; portable ICE BOX; ¾ size innerspring MATTRESS, must be good condition. OS 5-2566 before 4 o'clock. B

BABY STROLLER, reasonable. JIM DRIVER, OR 4-3262. B

LUGGAGE RACK, MG, MARJORIE HATFIELD. Write to Northrop News, Box 120. B

BAR BELLS, M. A. EDILSON, FR 4-3589.

UKULELE. ERNIE. OS 6-2441. B

PLAY HOUSE, child's for 6 and 7 year olds, at least 7' x 8' x 6', good condition, reasonable. T. CROSKREY, DA 6-5897. B

HORSE, gelding or mare, approx. 3 to 6 years old, must be gentle and priced reasonable. PL 6-4952. B

FOR TRADE

HOUSE, 3 yr. old, two bedroom, 50x150 ft. lot, space to build additional unit, improved streets, completely fenced, close to schools, shopping areas, will trade for 35 ft. or larger trailer. FR 9-2687. C

DODGE, 1951 sedan in very good condition, valued at over $500, give as down payment on lot anywhere in Orange County. Prefer beach property or duplex site. M. LANZA, LA 5-9583. C

CAR RADIO, fits all cars, like new, Motorola, trade for car radio for '42-'48 De Soto or Chrysler car. HAROLD PARRY, OR 1-9837. C

SEWING MACHINE, console, electric, like new, for a blond bookcase headboard for a double bed, good condition. OS 5-2566, before 4 o'clock. C

EQUITY, $1400 equity in 1955 Chevrolet Bel-Air V-8, for clear 1952 or 1953 auto in good condition, will consider clear lot or property equity in Antelope Valley. FORREST E. SHANKS, WI 7-2820. C

FOR SALE OR TRADE

HUDSON 1948, Commodore "6". $245 or trade for real estate. HENRY, message phone PL 2-9582. M

MG TD 1953, take over payments, plus equity, cash or preferably another car. LARRY DON VITO, LU 1-3995. M

TV, console, 16" Silvertone, fair condition, $35. HERB WONG, DA 9-2839. M

DISHMASTER, wall type, used two months, $50, your price $34.50, or trade for sink type Dishmaster. DON O. NICOLAI, DA 6-7178. M

BUICK, 1947 super, new tires, $200, best offer or trade for $125 and transportation car. JERRY L. BARFUSS. Write to Northrop News, Box 124. M

TABLE SAW, Craftsman, tilting arbor, 10-inch, with stand, table extension, molding cutter head and one horse motor, cross and ripping guides, $110; ENCYCLOPEDIA Britannica, complete with dictionary and two year books, $150. Might trade. ALAN B. JONES. Write to Northrop News, Box 121. M

AMPLIFIER, 18 amp, 15" speaker, 3 jacks, worth $50. Sell for $20 or trade for pair of men's shoes or boot roller skates in good condition, size 9½ or 10. H. A. HARDY. Write to Northrop News, Box 122. M

(Continued on Page 4)

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 3)
GARVEY & PECK, El Monte. (Would like riders to be around El Monte, Baldwin Park or Puente). RICHARD H. GREEN (5501-38062, Ext. 2200). 12-3

(Zone 4)
IMPERIAL HWY. & FIRESTONE BLVD., Norwalk. (Room for at least 5 people, from Norwalk and vicinity. Starting point is: Imperial at Firestone, continuing west on Imperial Hwy). EDDIE G. LAPELA (5504-21043, Ext. 1424). 12-4

PIER & PROSPECT, Hermosa Beach. ARNETT E. WAGNER (5544-38490, Ext. 2645). 12-10

(Zone 12)
ROSE & LINCOLN AVE., Venice. (Can accommodate 4 riders). H. M. PURYEAR (5507-41, Ext. 526-564). EX 9-3806. 12-12

7:30 a.m. — 4:15 p.m.

(Zone 1)
NORMANDIE & 1ST ST., (Ride offered or car pool from 1st St. & Normandie or vicinity, will be traveling down Crenshaw to Plant 2 and return same route.) FRANK WOHLGENANT (5940-35197, Ext. 2661). 13-1

(Zone 4)
SANTA ANA. (Riders wanted from Santa Ana, Garden Grove or Anaheim.) FRANK L. REED (5530-21186, Ext. 2398). KI 2-1270. 13-4

(Zone 5)
CARSON & STUDEBAKER, Long Beach 8. (Car pool desired.) ROBERT B SPEAKMAN (5917-38640, Ext. 1721). L. B. 314-325. 3-5, 13-5-

(Zone 13)
VENTURA AND SEPULVEDA BLVD., Sherman Oaks. (Car pool desired). H. M. STANFIELD (5960-38236, Ext. 1468). ST 9-3945. 13-13

(Zone 14)
MAGNOLIA AND LAUREL CANYON, North Hollywood. (Car pool preferred with 3 or 4 people). GEORGE IZMIRIAN (5940-39169, Ext. 2661). SU 1-0955.

WHITSETT AVE. & MAGNOLIA BLVD., N. Hollywood (Car pool considered.) I. B. EIGLER (3535-33626, Ext. 627-2035). SU 3-3458. 3-14, 13-14

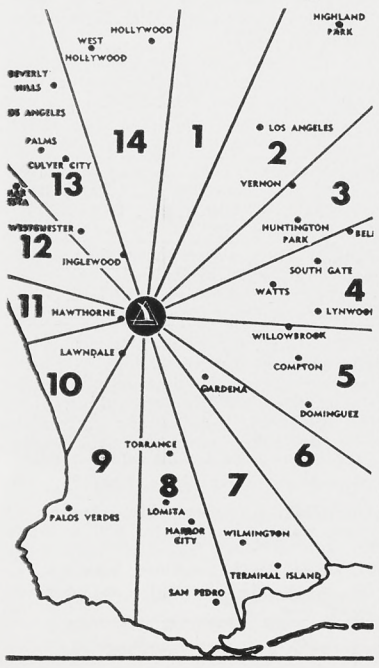
3:45 p.m. — 12:15 a.m.

(Zone 2)
VERMONT & VERNON OR HOOVER & VERNON, Los Angeles 37. (Will pick up riders on any "south" street from Figueroa to Crenshaw between Santa Barbara to Imperial Hwy. Car pool considered.) O. "WOODY" HELTON (5445-38795, Ext. 2226). 16-2

(Zone 5)
PALO VERDE & DEL AMO BLVD., Lakewood. (Would like a ride or will take passengers, two or four.) WELDON CHANDLER (5501-38483, Ext. 2200). TO 6-2846. 6-5, 16-5

(Zone 10)
SEPULVEDA & ROSECRANS, Manhattan Beach. (One or two riders wanted, one way or both ways). RAY GRISH (5231-15345, Ext. 2200). FR 2-4673. 16-10

Zone Map



RIDES OFFERED

4:45 p.m. — 1:15 a.m.

(Zone 4)
BETWEEN ATLANTIC & BULLIS RD., Lynwood. (South of P. E. tracks.) JOHN R. SHERROD (5241-38952, Ext. 1798). NE 5-6646. 8-4, 18-4

(Zone 10)
HOLLYWOOD RIVIERA, HERMOSA or REDONDO, Redondo Beach. (Will be glad to take anyone from and to Redondo, Hermosa and Manhattan Beaches, also Palos Verdes & Hollywood Riviera). ALLEN A. MOUCHERON JR. (5503-38145, Ext. 1227). FR 5-2723. 18-10

(Zone 14)
CENTURY & PRAIRIE, Inglewood. (Will pick up at 4:15 p.m.) FRANK A. MANSANARES (5584-22114, Ext. 1381). 18-14

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 3)
SLAUSON AVE. & RANDOLPH ST., Bell. (Would prefer ride or in a car pool. Would drive my car with 4 or 5 riders.) LUCILLE FRILOT (5524-26561, Ext. 1847).

GARVEY & PECK, El Monte. (Would like riders to be around El Monte, Baldwin Park or Puente). RICHARD H. GREEN (5501-38062, Ext. 2200). 2-3

SOTO AND 28TH, Los Angeles. CLARENGIA COOK (5583-38843, Ext. 1292). CA 1-1665. 2-3

(Zone 4)
STATE ST. & IMPERIAL HWY., Lynwood. JUANITA COFER (5235-26561, Ext. 1847). NE 6-6646. 2-4

(Zone 5)
BUDLONG AND 135TH, Gardena. LENA G. NORMANDIE (5507-41, Ext. 526, 564). DA 9-1846. 2-5

(Zone 6)
AVALON & VICTORIA, Gardena. WM. GLENN SEYMOUR (5231-37765, Ext. 1663). DA 9-3914. 2-6

AVALON & VICTORIA, Gardena. DAVID COAD (5544-21666, Ext. 2645). 2-6

E. OCEAN BLVD. & 60TH PLACE, Long Beach 3. (Must be picked up at 60th Place and E. Ocean as there is no transportation in the area at this hour.) RUTH WILSON (5353-38881, Ext. 2174 or 2179). LB 9-8033. 2-6

(Zone 9)
COMPTON BLVD. OR 154TH ST. & PRAIRIE, Lawndale. (Would like steady ride, am always waiting.) KATHLEEN T. RHODES (5503-18245, Ext. 2681). OS 6-8346. 2-9

(Zone 10)
PALM DRIVE AND 14TH or 16th St., Hermosa Beach. VIVIAN FLY (6270-25488, Ext. 1683 or 1684). FR 2-1605. 2-10

(Zone 13)
MANCHESTER AND FREEMAN, Inglewood. MARIE L. MANNI (5507-38209, Ext. 526, 564). 2-13

7:30 a.m. — 4:15 p.m.

(Zone 1)
HYDE PARK BLVD. & 8TH AVE., Los Angeles. PATRICIA R. WILLISON (8620-38986, Ext. 1751). PL 8-8698. 3-1

(Zone 3)
MANCHESTER & MAIN, Los Angeles. ALFONSO HART, JR. (7000-38940, Ext. 788). 3-3

ONTARIO area (just outside of Pomona). E. SHECHTMAN (5940-36143, Ext. 2661). 3-3

(Zone 5)
MILLER & LA PALMA, Buena Park. GERRY MENG (3642-13308, Ext. 567 or 2769).

CARSON & STUDEBAKER, Long Beach 8. (Car pool desired.) ROBERT B. SPEAKMAN (5917-38640, Ext. 1721). L. B. 314-325. 3-5, 13-5

(Zone 8)
WESTERN & TORRANCE BLVD., Torrance. MARY O. PATTERSON (3140-38981, Ext. 457). FA. 8-7691. 3-8

YUKON & 174TH ST., Torrance. SONDRA WELTY (1421-38961, Ext. 691). DA 4-6593. 3-8

PACIFIC COAST HWY & WALNUT, Lomita. (There are two of us needing rides from Lomita). CLARA V. NEWKIRK (5910-39174, Ext. 2674). DA 6-5349.

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 10)
ROWELL ST. & 2ND ST., Manhattan Beach. (Near Mira Costa High School.) HARRY J. BLACY, JR. (3160-30569, Ext. 1982-1818). FR 2-9794. 3-10

PACIFIC COAST HIGHWAY & PIER AVE., Hermosa Beach. JO ANN COOK (9330-38245, Ext. 1471-2111). FR 5-7481. 3-10

HAWTHORNE BLVD. & 190TH ST., North Redondo. (Near Southwest Park & El Nido Gardens). PAT STAHLE (4240-13991, Ext. 777). 3-10

(Zone 12)
INGLEWOOD & QUEEN, Inglewood. (Car pool considered.) GEORGE J. DRIVER, JR. (9320-39150, Ext. 2151). 3-12

PACIFIC PALISADES, (Near Pacific Palisades Park.) E. A. KRAFT (8100-38911, Ext. 1282). EX 3-1092. 3-12

(Zone 13)
VENTURA AND SEPULVEDA BLVD., Sherman Oaks. (Car pool desired). H. M. STANFIELD (5960-38236, Ext. 1468). ST 9-3945. 3-13

INGLEWOOD BLVD. & MANCHESTER, Inglewood. (Want ride Mon., Wed., & Fri. only). D. R. STUETTIG (3870-12676, Ext. 582). OR 7-0588. 3-13

LA BREA AND HYDE PARK BLVD., Inglewood (3). (Would also be interested in car pool). HAZEL STEWART (9380-28073, Ext. 2254). 3-13

(Zone 14)
WHITSETT AVE. & MAGNOLIA BLVD., N. Hollywood. (Car pool considered.) I. B. EIGLER (3535-33626, Ext. 627-2035). SU 3-3458. 3-14, 13-14

MAGNOLIA AND LAUREL CANYON, North Hollywood. (Car pool preferred with 3 or 4 people). GEORGE IZMIRIAN (5940-39169, Ext. 2661). SU 1-0955. 3-14

3:45 p.m. — 12:15 a.m.

(Zone 1)
FLORENCE AND CRENSHAW, L. A. (Need ride both ways, but ride home at 12:15 will do). MYRNA McGUFFIN (5231-38626, Ext. 2200 or 1875). OS 6-4391. 6-1

(Zone 5)
PALO VERDE & DEL AMO BLVD., Lakewood. (Would like a ride or will take passengers, two or four.) WELDON CHANDLER (5501-38483, Ext. 2200.) TO 6-2846. 6-5, 16-5

(Zone 8)
WESTERN & CARSON ST., Torrance. (I would like to drive my car (1) one or (2) two days a week if possible. Otherwise I would like to find a ride.) ROGER G. AULD (7220-38611, Ext. 2243). FA 8-4990. 6-8

(Zone 9)
HAWTHORNE BLVD. & W. 153RD PL., Lawndale. JUNE SMITCH (5351-37979, Ext. 2582). OS 6-0894. 6-9

4:45 p.m. — 1:15 a.m.

(Zone 4)
BETWEEN ATLANTIC & BULLIS RD., Lynwood. (South of P. E. tracks.) JOHN R. SHERROD (5241-38952, Ext. 1798). NE 5-6646. 8-4, 18-4

(Zone 5)
ROSECRANS & VERMONT, Gardena. (I'll have to be delivered to my door at night.) JIMMIE LEE STANLEY (5524-38358, Ext. 2209). DA 4-8433. 8-5

(Zone 14)
BEVERLY BLVD. BETWEEN LA BREA & FAIRFAX AVE, Los Angeles 36. CHRISTIE BOYKIN (5373-16730. Ext. 537). WE 8-9293. 8-14

SPLIT SHIFTS

(Zone 7)
PACIFIC COAST HWY & AVALON BLVD., Wilmington. (Will go to intersection of Sepulveda & Avalon. Yukon Bldg. Hours 4:15 p.m. to 12:45 a.m.) JOHN T. BERNAL (9330-27673, Ext. 2229). TE 5-2132. 10-7

(Zone 12)
LA TIJERA & 74TH ST., Westchester. (No public transit service before 6:45 a.m., immediate transportation necessary. Mariposa. Hours 6:45 a.m. to 3:30 p.m.) JOSEPH P. MARCANTONIO (6378-26053, Ext. 375, 376, 377). OR 1-7990. 10-12

IMPERIAL & INGLEWOOD AVE., Inglewood. (Ride wanted home only.) S. PUTNAM (6620-13741, Ext. 3291). OR 4-6911. 10-12

Buy Bonds Today

BBSF CLASSIFIEDS

(Continued from Page 3)

FOR SALE OR TRADE

TEST EQUIPMENT, 1955 Heath, 0-10 scope, TS-4 Swp. Gen., LG-1 Sig. Gen., BG-1 Bar Generator, TC-2P Tube Checker, GO-1B Grid Dip Osc., BE-2 Battery Eliminator, CC-1 Condenser Checker, AO-1 Audio Oscillator, MM-1 Multitester 20 K R/V, RCA-VTVM with probes, Gonset Super-Six Converter, Master All-Band Whip with Pre-max mount, no reasonable offer will be refused, desire camp trailer or boat and motor. FORREST E. SHANKS, WI 7-2820. M

HOUSE, 2 bedroom and den, dining room, 2 fireplaces, 2 car garage, 3½ miles from Northrop, 1200 sq. ft., $15,000; HARDWARE for double garage door, $10; 4'x4' basket type car-top CARRIER, $6; 24" throat jig saw and motor, $40; Thor, mangle ironer; 2 children's CAR PLAY SEATS, $5, or trade for what have you? C. F. SENGIR, JR., PL 6-3737. M

LINCOLN, '47, 1948 Mercury engine; portable professional DISC RECORDER; Craftsman 10" SWING SAW; 1 hp MOTOR; Hi-Fidelity 2-way SPEAKER SYSTEM in cabinet; 1.5 hp 110/220 volt MOTOR; 40-watt PA AMPLIFIER; or will trade for small motorboat, electronic test equipment, 15" coaxial speaker, or nearly new vacuum cleaner. W. S. COOK, DA 6-2467 evenings or week-ends. M

PLYMOUTH, '46 club coupe, $200; MOTORCYCLE, Harley W.R. track, all racing equip. including 18 gear changes, $400 or take pickup truck in trade; Triumph upsweep PIPES, $10. W. T. FARRIS, PL 5-4114. M

BUICK, '41 club coupe, $65; small KITCHEN TABLE, 5 chairs, $6; small apt. size WASHER, $11; welded steel rod CAR RACK, $6; two burner HOT PLATE, $3; 2 gas HEATERS, $6 for both, or trade for set of welding tanks or motorcycle. J. M. GRIDER. Write to Northrop News, Box 128. M

FREE (To be given away)

PUPPIES, half cocker and half toy shepherd. K. FLANAGAN, DA 6-4574. D

RENTALS OFFERED

UNIT, new one bedroom in court, bath and shower, $60 per month, water paid, children OK. MILDRED DAVIS, FA 8-7533.

APARTMENT, new duplex, 2 bedroom, unfurnished, Prairie Ave., opposite Alondra Park, $75. V. F. RILEY, FR 5-2780.

BACHELOR APT., clean, furnished; utilities pd.. $45 mo. AX 3-0578. E

APARTMENT, 1 bedroom, modern, nearly new, adults, $67.50 per month. W. W. BISHOP, PL 9-7917.

APARTMENTS, unfurnished, new, 1 bedroom, garb. disp., 20 min. from Northrop, $65 and $70. PL 6-4050 after 6 p.m. E

SLEEPING ROOMS, private entrance, near shopping, new home, $10 week or $35 month. JIMMIE LEE STANLEY, DA 4-8433, after 11 a.m.

GARAGE APARTMENT for gentleman, private shower, $10 per week, utilities paid, Hawthorne. GRACE McCORMICK, OS 5-3985 after 11 a.m. E

HOUSE, 1 bedroom, partly furnished, garage, no children or pets, Hawthorne. OS 6-1856. E

SHARE HOME, girl to share my home, $10 wk., child OK, transportation to Northrop, day shift, Inglewood. OR 7-9496. E

APARTMENTS, one and two bedroom, new, furnished and unfurnished. TV jacks and garbage disposals, $50 per mo. and up. S. B. ELLISON. Write to Northrop News, Box 116. E

APARTMENT, clean, quiet, 1 bedroom, upper, newly decorated, 21' living room, garage, ½ block to bus and mkt. $70. Adults, no pets, So. Hobart. A. G. PATTON, PL 9-4677. E

GARAGE, East 122nd St., corner Prairie. OS 5-6719 after 5:30 p.m. E

APARTMENTS, ready for occupancy September 1, 2 bedroom, tile and natural wood finish kitchens, TV and phone jacks, hot water furnished, close to Northrop. $90 and $95 per mo. MARY A. ZALESNY OR 1-2708. E

BACHELOR APT., partly furn., pvt. bath, gas and water paid. M. C. KOSTENBADER, OR 2-9398. E

TRAILER SPACE, modern, up to 40', children and pets OK, Inglewood, $25. OR 2-8230. E

ROOM with light housekeeping privileges, close to plant. All utilities paid, men only. E. M. RODISH, OS 6-8008. E

APARTMENT, 1 bedroom furnished, garage, suitable for couple, no children, no pets, near Crenshaw and 63rd St., $60 month. W. J. LAMOREY, OR 2-7746.

SLEEPING ROOM, large, in private home, near stores, transportation, plant, for one or two ladies or gentlemen, $8 weekly. R. BARR, PL 6-1755. E

APARTMENTS, new, 1 bedroom, unfurnished, no children, $65 and $70 per month. JACK SOWARDS. Write to Northrop News, Box 123. E

SINGLE ROOM, center Manhattan, near beach, stores, churches. FR 4-0909. E

RENTALS OFFERED

HOUSE, 4-bedroom, Lake Arrowhead, by week or day, reasonable. DOROTHY MOORE, DA 4-5774 after 6:00 p.m. E

SHARE HOME, lady to share my home, reasonable, 3 bedrooms, TV, all new furniture, no pets, must give references. I work night shift. LULA HARDING, DA 9-5342. E

HOUSE, small furn., in rear, for light housekeeping, completely private, $50 month. Utilities paid, one man preferred. OS 6-1607 or DA 9-5760. E

FURNISHED ROOM, 5 blocks from Northrop, night or day shift man, $8 per week. OS 5-5850. E

RENTALS WANTED

APARTMENT, unfurnished, 1-bedroom, $65. KATHLEEN BURDEN, PL 8-2416. F

HOUSE, 2-bedroom, garage, in Gardena or Torrance, children, by October 1. REX BURNHAM, NE 5-4515. F

CHILD CARE OFFERED

NURSERY SCHOOL, Gardena cooperative, Compton Blvd. near Crenshaw, nonprofit, 9 to 11:30 a.m. daily. FR 4-1863 or PL 5-4752. G

CHILD CARE, licensed home, near Northrop. OS 6-2147. G

CHILD CARE, will care for one or two pre-school children in my home (day or nite shift), hot meals, fenced yard, plenty of toys and play yard equipment. DA 4-4410. G

CHILD CARE OFFERED

CHILD CARE, will care for girl aged 3 to 5 as a companion for my girl aged 3, have large walled yard, indoor and outdoor play area. MARTIN R. HERDER, FR 4-0247. G

LOST

RING, 1951 senior class, gold band, ruby stone with tartar head, initials A.A.B. inscribed inside, lost vicinity of plants 1, 2, or 3. ARTHUR A. BLAIN, NE 2-7649. J

PERSONALS

RIDERS WANTED, share expenses and drive, to Norfolk, Virginia. Leaving September 9 or 10. One or two riders. FR 9-2295. L

IRONING AND MENDING in my home. OR 2-5756. L

IAS SPONSORING FULL PROGRAM IN COMING MONTHS

The September and October schedule of activities for the Los Angeles section of the Institute of Aeronautical Sciences has been announced.

Specialist meeting, Tuesday, September 6, 8:00 p.m., IAS building. Subject — "Non-Equilibrium Turbulent Boundary Layers". Speaker—Dr. Donald Coles, Research Fellow, California Institute of Technology.

Dinner meeting and annual section business meeting, Thursday, September 15, IAS Building. Social hour will be at 6:00 p.m., dinner at 7:00 p.m., and the meeting at 8:15 p.m. Speaker will be Willis M. Hawkins, director of Engineering, Lockheed Missile Systems Division, Van Nuys.

Specialist meeting, Tuesday, September 27, 8:00 p.m., IAS Building. Subject — "Lockheed Icing Wind Tunnel." Speaker—Carll Vrooman, Thermodynamics department, Lockheed Aircraft Corporation.

Confidential Dinner meeting, Thursday, October 20, IAS Building. Social hour starts at 6:00 p.m., dinner at 7:00 p.m. and the meeting will start at 8:30 p.m. Subject — "Development History of the F-100". Speaker—L. P. Greene, Aerodynamics group leader, North American Aviation, Inc.

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse (175 N. Hawthorne Blvd.) unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

ART CLUB (nights)
Meet in Annex every Thursday from 1:00 to 3:00 p.m.

BADMINTON, Ed Sellon
Meet at Leuzinger High School Gym every Tuesday evening, 7:30 p.m.

BIBLE STUDY, Roy Stahl
Meet daily, Plant 1, east mezzanine conference room, 11:30 a.m.; Plant II, second floor, center conference room, 12:00 p.m.; Plant III, conference room, 11:00; Nash Building, 12:15.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Ralph Vincent
Winter leagues now forming.

BOWLING (nights), Garland Steiner
Winter leagues now forming.

BRIDGE CLUB, Walt Darby
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Robert Carberry
Meet every other Friday evening, 7:30 p.m. Next— Sept. 2.

CAMERA CLUB (nights), Gene Beck
Meet every other Saturday 7:30. Next —Sept. 3.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF, Andy Titus
Twilight leagues now in progress.

GUN CLUB (days), Dick Booth
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—Sept. 12.

MIXED CHORUS, Florence Graveline
Meet every Wednesday evening 7:30.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Bill Kappele
Meet 1st and 3rd Tuesday of each month at Annex, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller Skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday, Long Beach Gun Club, 10:30 a.m. Next—Sept. 3.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month for summer.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING CLUB (nights), Tex Hylton
Meet 3rd Wednesday of month, 1:00 p.m.

SOFTBALL (days), Dave Heaps

SOFTBALL (nights), David Carney
Black Bat Tournament playoffs now in progress.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn. 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays. Beginners' class will start on Sept. 18.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Bill Steffen
Meet every Thursday evening, 6:30 p.m. "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ward Newton
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins
Openings available winter leagues.

DINNER CLUB, Hazel Stewart
First Fall meeting: Sept. 13, Western Ave. Golf Club. Dinner $2.25 per person.

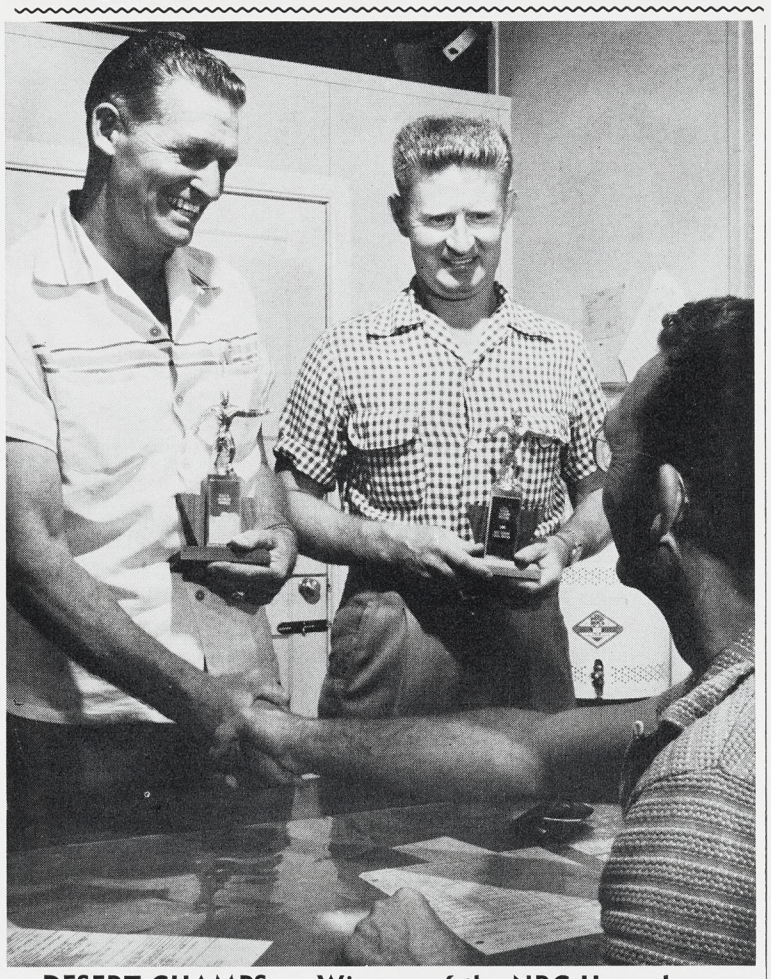
INTERIOR DECORATION
Weekly meetings will resume this Fall.

SENIOR GIRL SCOUT TROOP (Mariners), May Hawkins
Swimming, boating and seamanship. Meet Thursdays, 7 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Vi Murphy
Meet first, third Thursdays, 7:30 p.m.

SPORTS
The Northrop News

WOMEN OPEN DINNER SLATE



DESERT CHAMPS—. Winners of the NRC Horseshoes pitching championship at Edwards AF Base were Louie Baker, left, and Bud Adams. Here champs receive trophies and congratulations from G. L. Myers, club commissioner. Sport is highly popular at desert.

SKIN SPECIALIST FIRST SPEAKER

Special for the ladies!

Mme. Francine Chevet, famous French skin specialist, will be the featured speaker at the first NRC Women's Dinner Club meeting of the season. The meeting will be held at the Western Avenue Golf Club on Tuesday, September 13, at 7:30 p.m.

Mme. Chevet, born in Burgundy, France, studied medicine at the famous Sorbonne school in Paris and, until recently, was skin advisor at one of the major film studios. Her unique method of skin care, according to statements by local beauty editors, is a secret process found by a German scientist in a treatise written in the time of Pompeii. Mme. Chevet is reported to be one of only three persons in the last 120 years to learn the ancient secret.

Each lady in attendance will receive a free skin care kit from Mme. Chevet.

Dinner tickets will be $2.25 each. Reservations and tickets may be obtained by contacting the Personnel Activities office, Plant I, extension 2784.

Top Musicals Featured For Mixed Chorus Show

With the vacation season nearing the end, the NRC Mixed Chorus is going all-out in preparation for its October musical production.

The show will consist of songs from South Pacific, Wizard of Oz, Oklahoma, The King and I, Carousel, and the Student Prince, complete with sets and costumes.

Following the October production the Chorus plans a Christmas show to be presented on several different dates at hospitals and orphanages.

There is a general call for adult voices. In addition, the October show will require children's voices; therefore, all Norcrafters' children between the ages of 7 and 13 are also invited to attend the Wednesday evening meetings of the Chorus.

Meetings start at 7:30 p.m. at the NRC Clubhouse.

Additional information on Mixed Chorus activities may be obtained by contacting the Personnel Activities office, extension 2784.

SQUARE DANCERS BEGIN CLASSES ON SEPTEMBER 18

It is dos-a-dos time again. NRC Square Dance Club members are reactivating this popular activity after a summer lull and beginners' classes are scheduled to start on Sunday, September 18.

Carl Malkow, favorite Southland caller, will act as instructor and caller.

Classes are scheduled each Sunday beginning September 18, to continue through December 4, from 3:00 until 5:30 p.m. at Swimms Barn, 15016 Daphne Street, Gardena. A fee of 50¢ per dancer will be charged. All Norcrafters are invited.

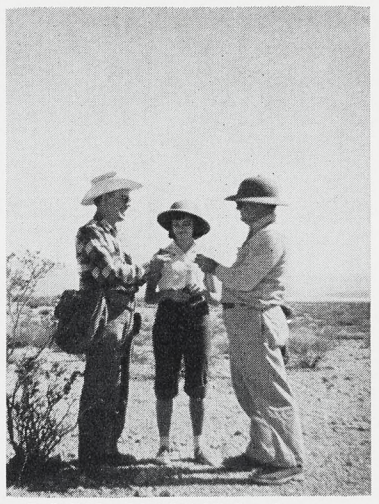
Rock Hound Activities On Upswing

By HAL HUNSBERGER
President
Northrop Reception Club

The Gem and Mineral Club members pictured below are some of a group who recently visited Pisgah Crater near Barstow.

In the picture, Elmer Storm, Club comish, and Lionel Amelotte give Pebble Pup club member Carol Amelotte, Lionel's daughter, some tips on rock hounding.

Elmer reported that the group came back with a good supply of



ROCK HOUNDS Storm, Amelotte, and Amelotte.

yellow, red and banded Jasper, agate, banded agate, geodes and nature tumbled stones. The latter are prized for their high natural polish.

The Gem and Mineral club recently joined the California Federation of Mineralogical Societies.

Attention, all boys between the ages of 14 and 16! The NRC sponsored Sea Scout ship, Sea Gull, has room for many more members, according to Joe Zahn, institutional representative, and Ernest Bury, Sea Gull mate. Future plans include many trips to Catalina, fishing expeditions, and intensive seamanship training. The Sea Scouts meet every Wednesday evening, 7:30 p.m., in the Scout cabin at 134 Grevillea, Hawthorne.

SUMMER'S END—. Among finalists in NRC Summer Bowling tourneys was quartet of winners pictured, from left: Sig Lytzen, men's high individual game; Doris Ritter, women's high individual game; Al Nichols, men's high series; Audrey Hanstad, women's high series. Winners are all from Finance league.

HARVEST OF THE SEA—. Recent expedition of NRC Surf Fishing club members to Carlsbad netted this array of croaker and corbina. Pictured, left: B. J. Gardner, Advanced Production Inspection; Dixie Griswold, wife of Ted Griswold, Engineering; Ted. Next meeting of the Surf Fishing club will feature movies taken at Seal Beach. Meeting will be September 6.

THE Northrop Scene BY DAY AND NIGHT

. . . Plus Its Own Reward

SAFETY is its own reward, but Norcrafters also won recognition from National Safety Council for 1954 showing. Plaque denoting outstanding record is shown to Vice-president R. R. Miller (second from left), by Walt Fischer, Safety. At left; John Breneman, assistant factory manager, nights, and chairman, Safety-Conservation general committee; at right: Jim Tuthill, manager, Labor Relations Administration.

Highlight of Management Club Year

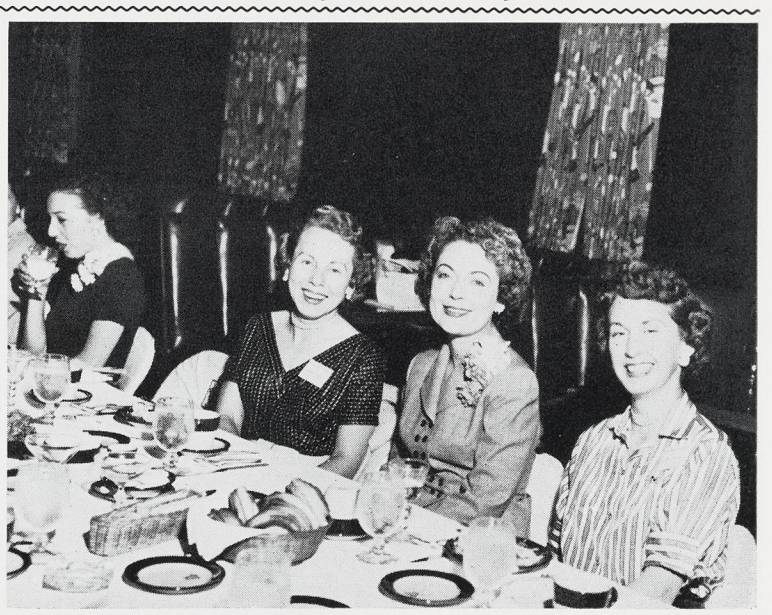
INITIAL PLANS for annual dinner-dance of Management Club—October 15 at the Ambassador—were discussed by this MC group. Seated: H. J. "Bud" Burns, representing Palmdale; Maxine Lonsdale, secretary; Scotty Smith, president; Elise Williams, ticket chairman. Standing: Phil Smalley, publicity; Charles Bradford, senior past president; Charley Davis, treasurer; Bill Cox, representing Jim Dickey, finance; Jack Miller, night shift v-p; Ralph Hopkins, program; Lloyd Johnson, membership; Andy Koren, sergeant-at-arms; and Robby Robinson, facilities. Annual festivity is highlight of Management Club year, attracts capacity crowd.

Engineers' Shangri-La

SHANGRI-LA CELEBRANTS—. Among the guests at Engineering division "Shangri-La" dance were, from left: John and Mrs. Bellevue, general supervisor, Engineering Data; John and Mrs. Strater, supervisor, Missile Property Administration; and Paul and Mrs. Wierk, chief, Engineering Administration. Dance, an annual Engineering summer event, was held August 6.

NIGHT FIGHTER ASSOCIATION held luncheon reunion meeting in conjunction with Air Force Association meet this month in San Francisco. Scene shows Northrop's Gil Nettleton, outgoing prexy of NFA, addressing audience. At head table: Col. Vic Milner, new AFA president; Capt. Tom McCabe, interceptor instructor of year; Beirne Lay, jr., film producer-writer; Charles Murphy, Fortune magazine; Lt. Col. Robert Fishel, commander 496th FIS, Hughes Trophy winners; Lt. Gen. Leon Johnson, CO of Continental Air Command; Brig. Gen. W. W. Kratz, past NFA president; Lt. Gen. F. F. Everest, deputy chief of staff, Operations, Hq., USAF; Brig. Gen. Cecil Combs, vice-commander, Crew TAF; Maj. Gen. Winston P. Wilson, chief, Air National Guard; Maj. Gen. Fredrick H. Smith, jr., Vice-commander, Continental ADC; Northrop Vice-president John R. Alison, outgoing president, AFA; and A. R. DeBolt, newly-elected vice-president, NFA.

GRAPHIC ILLUSTRATION—. Large "clock" illustrates the 12 agencies which receive benefits from Norcrafter AID contributions. Viewing it, from left, clockwise, are these Norcrafters: Norris Isaac, E. T. King, and Pat Calloway, all Process Paint and Upholstery; Sgt. Gaston Kibodeaux, Plant Security and Protection; Dorine Benkendorfer, Payroll; and Marie Tully, Personnel Activities. Standard AID contribution of 12 minutes weekly base pay is goal established for Norcrafter donors. AID sign-up forms are still available from department clerks.

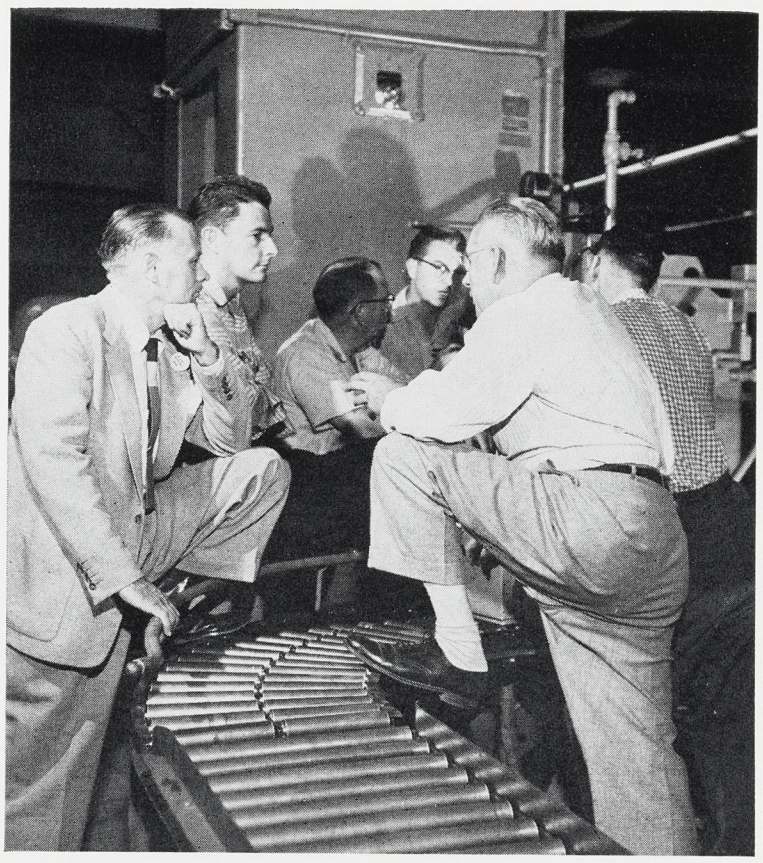


WELL REPRESENTED—. Some of the Norcrafter secretaries in attendance at recent installation of officers for the Airborne Chapter of National Secretaries Association (International) are pictured, from left: Dorothy Moore, Manufacturing; Audrey Rose, Radioplane; Isabelle Lowery, Spare Parts Administration; Kay Cribbs, Engineering; Barbara Proffitt, Guidance and Controls. Membership is open to all secretaries.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, September 14, 1955

Navy Blue at Anaheim



NAVY BLUE, for true, has joined Army and Air Force colors at Anaheim of late. Confab shows some representatives of INSMAT (Inspector of Naval Materials) and NOTS (Naval Ordnance Test Station, Pasadena), plus Northrop's Paul Jones, discussing new Navy project set up in shop area where Norcrafters are already busy at work on tight schedule. Personnel will be seeing, hearing more of these men as project rolls quickly ahead—from left, O. C. Palmer, Anaheim Division INSMAT office; John Caffey, INSMAT field rep; Harold Bennett, INSMAT resident naval inspector for Anaheim; Jones; foreground, L. C. Besson, INSMAT Production Engineering supervisor; then Ed Boos, NOTS tech rep attached to Anaheim. Hidden—R. E. Crescent, NOTS Industrial Division. Not aboard for pic—INSMAT Branch Supervisor Bob Wunder . . .

Scorpions in Northwest

SCORPIONS of the 460th Fighter Interceptor Squadron, Portland, Oregon, shown against picturesque backdrop of typical Northwest scenery — complete to log booms floating downstream. An official photograph from Portland AFB, the picture was supplied by Tom Kelecy, Northrop tech rep assigned to 460th.

MCDONNELL DEVELOPMENTS

Aero Group SAE Meet In October

At least a dozen Norcrafters will participate in the formal program of the golden anniversary aeronautic meeting of the Society of Automotive Engineers at the Hotel Statler next month.

A combined meeting, aircraft production forum, and engineering display, the event will be held from October 11 to 15, E. W. Rentz, jr., manager of the SAE western branch office, has announced.

A large number of engineering personnel have been invited to participate, Rentz said, to encourage mutual understanding and teamwork among the various segments of the engineering-production team.

George Mangurian, chief of Structures, will chairman an afternoon session on Materials and Structures. W. E. Woolwine, chief design engineer, is panel leader of a discussion on wings, with W. R. Slagg, Airframe and Mechanical Design, as secretary.

John Van Hamersveld, general supervisor, Producibility Engineering, heads a panel entitled "Forging Techniques to Reduce Machining". Secretary for the panel will be L. M. Christensen, also of Producibility Engineering.

A number of other Northrop

(Continued on Page 2)

INITIAL ASSEMBLIES COMPLETED; ENGINEERING DESIGN PROGRESSES

The first completed assembly built by Norcrafters under the McDonnell F-101 sub-contract was scheduled for inspection by a team from McDonnell last week.

Other F-101 aft center fuselage sections will follow off the Plant Four lines in steady succession until the quantity specified in the initial contract is completed. There is a possibility of a follow-on contract for a second, larger quantity.

Meanwhile, several score engineers are working in Plant One under Project Engineer Don Armstrong on another McDonnell sub-contract.

Close and effective cooperation has characterized work on both the contracts, both McDonnell and Northrop representatives have stated.

McDonnell has a number of representatives here, with Clyde Rockey heading the group on the F-101 production contract, and Elmer Vogel as McDonnell engineering representative. Roy Prueter is Northrop sub-contract project superintendent; Lew Shutts is foreman on the F-101 job.

In addition, Northrop has a resident representative at St. Louis in Bob Shafer, who maintains the necessary close liaison for Norcrafters on that end. Bob Reed, general supervisor of F-89 and miscellaneous contracts, handles contract details for Northrop.

The project system in use on the McDonnell production contract has contributed to the fine cooperation experienced thus far, Prueter stated last week. In this system each division involved has a representative assigned to the contract to contribute the organization's support whenever needed.

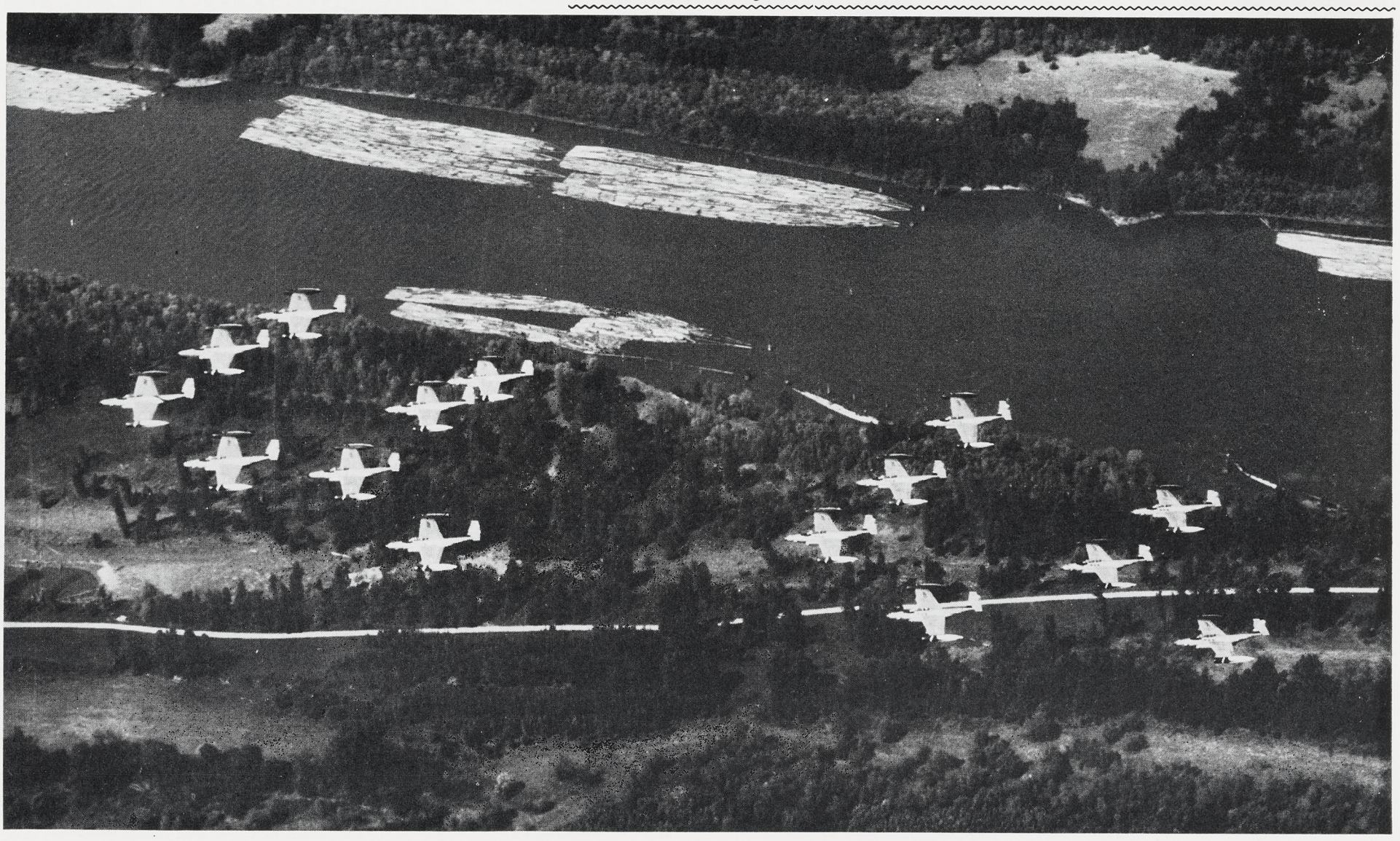
McDonnell tools are used in fashioning the assemblies for the F-101, which has been dubbed the "Voodoo", and which has been acclaimed in the nation's press for its excellent performance in tests.

The design sub-contract involves Northrop engineers from stress, weight, thermodynamics, planning, and loft groups.

McDonnell has a resident group of four engineers in attendance, headed by Vogel. Assisting him are Forrest Blanton, Leonard Boskamp, and E. T. Kisselburg.

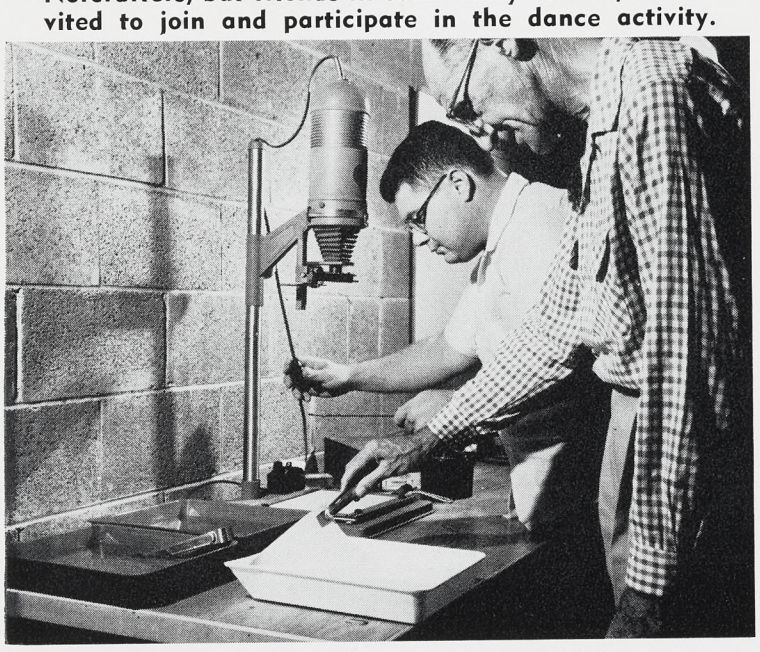
On the McDonnell production contract team, in addition to Rockey, are Julian Kay, Engineering rep; Emmet Fink, Tooling; and J. W. Harmon and Douglas Ball, Quality Control.

McDONNELL PHOTOS – SEE PAGE 6



Palmdale Section

BIG NEWS from Northrop-Palmdale of late is tremendous amount of ingenuity, imagination, and energy which personnel are putting into Northrop Recreation Club program now that NRC Clubhouse is open for biz . . . Of the raft of clubs already in full swing, here shown are three. Above pic catches square-dancers, from left—George and Madeline Bell; Rose and Chuck Brunner (Chuck is club comish); Peggy Wilkerson and Tom Post; and, partially hidden, Jim and Lois Sealley. Dancers meet second, fourth Saturdays, with beginners instruction Sundays. Not only Norcrafters, but friends in community as well, are invited to join and participate in the dance activity.

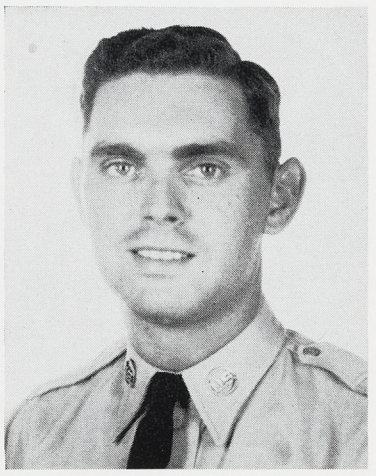


CAMERA CLUB—. With roster of some 20 camera enthusiasts already registered, NRC Clubhouse will soon have this darkroom fully equipped for developing, process work. Shown are Commissioner Don Foreman, left, with "Mac" McGuire. Camera Club will offer opportunity for learning photo fundamentals as well as vieing with fellow photographers for prizes.

"QUARTER MIDGETS" for Norcrafters and other youngsters from four to twelve is one of most spectacularly successful clubs under way. Commissioner Roy Mayfield points out racing is just like Indianapolis, with rules for safety strictly enforced . . . "this kind of racing is an education . . . " Shown—Jay Maddox; Lorna Boykin; Glen Baker; Frank McCarley, hidden behind Betty Sanders, center; Donna McCarley; Bobby Raikes and then Tommy Mayfield. Qualifying time for .05 mile circuit—10-11 seconds!

Down --- --- Range

A Kinross AFB airman, Staff Sergeant Richard D. Williams, 438th FIS, won ADC Airman of the Month honors in June for second straight win by a rep from that base . . . Williams, citation read, "is the type of airman upon whom this organization heavily depends to successfully perform its mission."



SGT. WILLIAMS

Fred A. Figge, Engineering, has been appointed California state chairman of Junior Chamber of Commerce International by state JCC executive board . . . In this post, Norcrafter Figge will coordinate JCC International programs and projects in California, including "Operation Brotherhood", organization program to fight Communism in Viet Nam . . . Further JCC honor to Figge involves his selection as California delegate to 10th World Congress of JCI, to be held in Edinburgh in November . . .

FRED FIGGE

Aero Group

(Continued from Page 1)

personnel are on panels at the meeting.

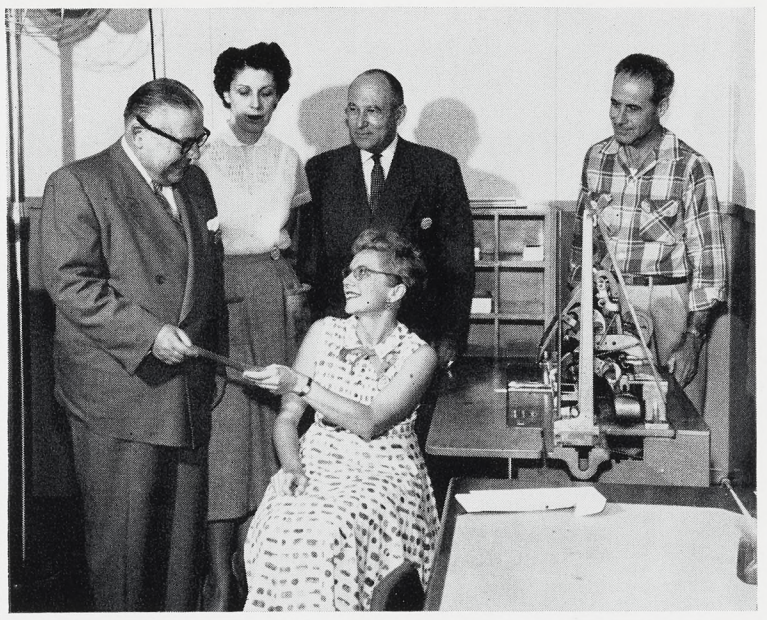
On the Tool Control panel is E. G. Patt, Manufacturing Control; V. S. Sorenson, Quality Control, and Howard Childers, Materials and Process, will be on the Process Control panel.

Paul Von Essen, supervisor of Engineering Liaison, is slated for participation on the panel on which "Engineering and Manufacturing Look at Flight Line Operations".

Palmdale Operations Services is represented by A. S. Bowser, jr., on the Powerplant Installations and Components panel.

Milt Uhler, general supervisor, Area and Equipment Engineering, and Plant Engineer Gene Musk are also listed on panels in the SAE program. Uhler is on the Plant Layout panel, and Musk on the panel for Preventive Maintenance and Equipment Replacements.

Dollars for Ideas



SUGGESTION for simple, ingenious attachment to Ellictt machine earned Jeanne Ogden, Personnel (seated), Suggestion Award. John B. Clark, director, Industrial Relations, and chairman, Management Award Committee, makes check presentation, while Dona Page, supervisor in Personnel; Dave Stadler, manager, Personnel Administration; and Joe Robinson, Suggestion Award, watch. Idea makes possible the automatic inking of stencils for rapid processing.

CHANGES IN VEHICLE CODE INVITE FURTHER STUDY BY STATE DRIVERS

California Norcrafters were informed by the public press last week of a number of changes in the vehicle code of the state.

Altogether, 199 amendments were passed by the state legislature affecting California automobile drivers.

Prominent among the changes is the prohibition of driving with parking lights—a practice frequently followed by drivers during twilight hours. Now it's illegal.

Motorists will soon see "Yield" signs at intersections not posted for full stops. At these signs the driver slows and shifts gears, unless another car is close enough to the intersection to create a hazard. Then he stops; otherwise he can slowly drive through.

A third new law legalizes left turns against the stop sign (after stopping) when the motorist turns from one one-way street on to another.

Slated to go into effect next year is a law providing for the suspension of registration and cancellation of license plates for any car involved in an accident and not covered by liability insurance.

Orientation Curriculum For Engineering Clerks

Norcrafters with clerical duties in the Engineering division have recently completed orientation classes sponsored by Administrative Engineering to encourage improvement and efficiency.

Classes were conducted by Pat Carlberg, 10-year Norcrafter who was Engineering clerk leadgirl until her recent promotion to secretarial duties.

About 125 Engineering division personnel attended the single sessions in groups of 12 to 15, Keith Thurston, general supervisor of Administrative Services, said. Classes ran about an hour and a half, and served as indoctrination sessions to new Norcrafters, as refresher courses to older ones.

Engineering Correspondence Control—C. W. Eyres, supervisor—handled the agenda; the Northrop Correspondence Manual and related procedures were basic references.

Although most of the classes were held in Plant Three, there were several held for the benefit of Norcrafters in Plant Two, as well.

PAT CARLBERG

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 2

Published every other Wednesday by
INDUSTRIAL RELATIONS DIVISION, NORTHROP AIRCRAFT, INC.
JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
Permission to republish material with credit to the Northrop News will be granted
News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

BBSF CLASSIFIEDS

Barter. Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — Wednesday noon before publication.

FOR SALE

TWIN BEDS, like new, box springs and mattress, cost $200, $75. LEMPI S. CALOF, OR 1-3229, after 5 p.m. A

BUGGY-CAR BED combination; $25; PLAYPEN, $7; BATHINETTE, $8; 16 foot FISHING BOAT, $100; MOTORCYCLE, 1950 B.S.A.; 650 cc, Golden Flash, $300. B. T. CASTRO, PL 3-9935. A

FORD COUPE, model A, $150. L. A. WILLIAMS, FA 8-4938. A

FORD, 1953 Victoria. Ford-O-Matic, new brakes, plugs and points, $1695. R. D. GARDNER, TE 3-9066. A

DEEP FRY COOKER, fully automatic Southern Electric. 5½ qt., like new, $12; MAYTAG WASHER, wringer type, good condition, $25. E. GRIFFIN, OS 6-3862.

WARDROBE TRUNK, Hartman, has three drawers plus deep hat compartment, all hangers complete, $10 or make offer. OR 1-0118. A

CHEVROLET, '53 Bel-Air, hard top, reasonable. ELIANE T. SMITH, OS 5-2286.

MERCURY, 1951 $695. VALERIA GIBSON, DA 9-6728 or FR 2-2929. A

SIAMESE KITTENS, Seal Point, 6 weeks old, pan broken, $10 and $15. ARNOLD STRAUB, OS 6-7723. A

UTILITY BOAT, 14′ Collins Craft, fiberglassed, steering wheel with control ropes and pulleys, tinted windshield, trailer custom built, boat and trailer like new, total $475. ELMER CHIODO, PL 4-7861. A

MANIFOLD ASSEMBLY, Offenhauser, never used, fits '47 - '53 Ford V-8, includes manifold head, four barrel carburetor, air cleaner chrome finish, $100. FR 5-3938, evenings. A

HALLICRAFTER, S-53 receiver, excellent, $55. JIM OLMSTEAD, FA 8-1075. A

BEDROOM FURNITURE, chest of drawers, knee-hole desk, nightstand, and youth size bed, painted white, in good condition, all items for $35. OS 6-5253, Monday through Friday only. A

WASHING MACHINE, wringer type, with timer, good condition, $15. EX 8-4007.

WASHING MACHINE, $40, automatic, good condition. CR 1-1612. A

FORD, '46 2-door, good tires, motor fair, best price over $125 takes. ROY ROBBINS, PL 6-4356. A

TYPEWRITER, Remington, 10″ standard, good working condition, $25. OR 2-9206. A

BABY BED; PLAY PEN; TAYLOR TOT; model T Ford TIRES, TUBES and WHEELS. L. E. MAJORS, PL 8-7041. A

PICK-UP, 1947 Crosley stake bed, cast iron block, 4 extra tires and 3 extra wheels, $175. R. A. RICHARDS, LB 20-6851. A

HOME, 3 years old, 2 bedrooms, fenced yard, recreation room and large bird aviary in rear, near ocean, full price $9800, must have $4200 down. WILLIAM J. DALY, OS 5-4537. A

CHEVROLET, 1954 four-door, model 210, brakes relined last month, $1550. S. A. MYERS, OX 9-7671. A

GEIGER COUNTER, Precision, excellent condition, used only 3 times, $85. M. L. HOBBS, FR 9-3639. A

MOTORCYCLE, 1950 Thunderbird, new lower end, no lights, $275. WALT COOK. Write to Northrop News, Box 202. A

NAILS, 85 lbs. 12d common; 55 lbs. 6d common, all for $5. PL 6-2975. A

TRANSCEIVER, General Electric, model AS-1B, 12 volt A/C, 3105 KC TX with 200-400 KC and std. B/C, nearly new, best offer. NOEL HOPS, OR 2-0014, after 5 p.m. A

JOINTER, Walker-Turner 6″ and 10″ TABLE SAW, ball bearing mounted with 2 ½ h.p. Master motors, nearly new, $135 for both. OS 6-7104, after 4 p.m.

REFRIGERATOR, General Electric, excellent condition, size 6, Monitor top enclosed, $45. MARIE G. JOOS, PL 6-7907.

TIRES, 2 white sidewall tires and tubes, 6.40x15, excellent condition, $20. L. ABRAMS. Write to Northrop News, Box 201. A

HEADSET, H-79, with boom mike, extra nylon ear cups, one year old, $65; H-15 COTTON HELMET (medium size), blue tinted goggles, attaching Type A-14 oxygen mask (med. size), $15, helmet has chamois lined ear cups. R. L. GLADSON, JR., LB 77836. A

HOUSE, in Yucaipa, 2-bedroom, birch cabinets in kitchen, natural wood doors, tile kitchen, bath, 60′ lot, patio, $8500 full price. WILLIAM W. WILSON. Write to Northrop News, Box 204. A

CHEVROLET, 1951, deluxe club coupe, $650. FOSTER DALE WAITS, OS 5-2704.

HOUSE, Norco, California, 2 bedroom, with foundation for 14′ x 16′ den and enough lumber to complete building, ½ acre of land, 6 shares water, near school, full price $9,000, $3,000 down. LEONARD MARTIN. Corona 153-M. A

RADIO-PHONO, beautiful large Chippendale, disk storage, plate glass top. D. E. ITKIN, WE 8-9927. A

BED DIVAN and CHAIR, frieze, Tuscan rose, $45. FR 4-5364. A

FOR SALE

FORD, 1950 V8, overdrive, $575. FRANK DE LONG, DA 9-2764. A

HOUSE TRAILER, 1953 model, 36′ all metal Glider, suitable for couple with child, furnished, Duncan Phyfe table, built-in 17″ TV, shower, house type plumbing, drapes, two large picture windows, four wheel electric brakes, $5,000 new, $2600 now, cash or terms. JACK VAN ORDEN, LEhigh 9-9276. A

REFRIGERATOR, Coldspot, 1½ years old, semi-automatic defrost, 11′, excellent condition, $150. C. ALLEN YEAGLE. Write to Northrop News, Box 203. A

PIANO AND BENCH, Mehlin mahogany, small equity and assume payments. DA 4-3400. A

SPEEDBOAT, 15′ inboard, seats 5, speed 35-40 MPH, modified Ford "60" engine, complete with trailer, ready to run, $950. W. WAGNER, VE 8-4512. A

SPORT SUIT, boy's, size 12, valued $40, $15; Cushman Eagle MOTOR SCOOTER '51 with '52 engine, recent overhaul, $150; simulated walnut BUFFET, $10; 16 cu. ft. FREEZER, old but good condition, $100. DONALD E. CARLBERG, OS 6-4752. A

DOGHOUSE, 30″ x 42″, removable top, $10; BABY BUGGY, large size, $10. FR 7-1170. A

MERCURY, 1951 convertible, customized, $995, $400 cash. TOM, DA 9-2845. A

BOAT, 16′ outboard runabout with 25 h.p. Evinrude motor, hull fully glassed, extras, boat and motor, $725. CHRISTINE GAY, L.B. 395-291. A

CHEST OF DRAWERS, dark wood, $10. ELSIE F. TOBER, DA 4-4046.

HI FI AMPLIFIER, custom made, and preamp, 10 watt, plus Sylvania AM and FM tuner, $55. ELEANOR MAYHUGH, DA 4-7612.

WASHER, Speed Queen, wringer type; 12″ table model Westinghouse TV, $25 each. DOROTHY BOSTON, TE 2-0724 after 5 p.m. A

HOUSE, 2 bedrooms and den, stucco, North Redondo Beach, hardwood floors, natural wood cabinets, tile kitchen and bath, attached garage, 2 years old, immaculate condition, $9,450 full price, $800 down. H. BECKMEIER, OS 6-2731.

COLLIE, 10 months old, pedigree, good with children, $50. JAMES C. WEBB, OR 7-0491. A

BICYCLE, boy's 28″, good condition, $10. M. E. GUFFEY, EA 2-1594. A

JUKE BOX, 20-player Seeburg, very good condition, $65. OS 5-2943. A

HOME, 3 bedroom, attached garage, 6′ redwood fence in back, patio, 15 minute drive to Northrop, $1000 down, $8350 full price. CHARLES LYONS. Write to Northrop News, Box 206. A

CHROME SET, blue, $60, cost $125; COCKTAIL TABLE; STEP TABLE; CORNER TABLE, all blonde solid oak. DA 9-3092.

JUKE BOX, Wurlitzer, 24-play, $75; PAINT SPRAY OUTFIT, piston type, $40. O. GRISCOTT, EX 8-2406. A

REFRIGERATOR, Coldspot, 4 years old, automatic defroster, freezer across top, 9.3 cu. ft., $100. OS 6-6721. A

WARDROBE TRUNK, good condition, $25. B. P. BRADY, DA 9-5646. A

RIFLE, 30-30 Marlin 336A, never fired, still has original factory grease, cost $84.75, $65. D. H. DAVIS, PL 6-0015 A

HOLLYWOOD BED, $40; power SEWING MACHINE, Singer, model 22W208 series for upholstery and drapery, $100; MISC. FURNITURE and LAMPS, cheap. LUGGAGE TRAILER, $25. ERNEST WINTER, PL 8-7597. A

MERCURY, 1953 Monterey, Merc-O-Matic, power brakes. OR 8-6597. A

SLIDE PROJECTOR, 100 watt, 35mm. with carrying case and 1 light bulb, $20. C. C. BESEKE. Write to Northrop News, Box 205. A

VACUUM CLEANER, Kirby upright with attachments, waxer and floor polisher, $60; two piece green frieze LIVING ROOM SET, T cushions, $60; Martin GUITAR, $50; WHEEL BARROW with rubber tire, $15. JUNE FLEURICHAMP, FR 2-4463. A

DINING ROOM TABLE, blonde, modern, drop leaf, good condition, 72″ x 42″, opened, $35; YOUTH BED, blonde side rails and mattress included, good condition, $30. CLAUDE MARTIN, NE 5-4155.

CHEVROLET, 1938 with 1947 motor, $45. OS 5-5850. A

SPINET PIANO, Stark, mahogany, must sell to make room for a baby, $400. PL 4-6262 between 6 and 8 p.m. A

CHEVROLET, my equity free, no down payment, assume $47 mo. payments on 1953 Chevrolet club coupe, GMAC, standard shift, $900 balance owing. DA 9-1677. A

BICYCLE, girls, 16″, sidewalk, with coaster brake and side wheels for beginners, $11.50; FORD 1931 model "A" tudor, rebuilt at cost of over $400, sell $100. C. M. CALLAWAY, OS 5-6016. A

LAND, 1.38 acre, view corner behind Eastfield Gate, Rolling Hills, $9,250. C. J. RENNIE, OR 1-2507. A

FOR SALE

VACUUM CLEANER, Hoover, $10. PL 5-2412. A

TYPEWRITER; double WAFFLE IRON; single WAFFLE IRON; STEAM IRON; SANDWICH MAKER; VIOLIN; BANJO; AUTOMATIC TOASTER; ELECTRIC BROILER. J. H. BUSH. OS 6-6449. A

RADIO-PHONO comb., large Chippendale, disc storage, heavy glass top, can be converted to bar, etc. D. E. ITKIN, WE 8-9927. A

WASHER, Westinghouse combination washing and spin dryer, $50, very good condition. A. C. DELL. Write to Northrop News, Box 212. A

ELECTRIC RANGE, Westinghouse fully automatic, 2½ years old, reasonable; 4′ x 8′ BOX TRAILER, solid sides, like new 7:00 x 15 tires with safety tubes; New Proto open and box end WRENCHES, 1¼″, 1 7/16″, 1½″, 1 5/16″. GEORGE DRIVER, OR 4-3262. A

WIRE RECORDER, Silvertone, with extra spools, best offer takes. RE 4-5330. A

ACCORDION, 120 bass Soprani 5 treble and 4 bass switches, cost $650, sell $300, or will trade for good used Spinet piano. LUCILLE AGNEW, OS 5-3634. A

HOUSE TRAILER, 1951, 15′ aluminum, stove, sink, water tanks, ice box, sleeps 4, elec. brakes, $625, full price; 1946 CHEVROLET, 2-door Fleetmaster, $200. DA 6-2653. A

TRAILER, one-wheel, all steel body, size 4′ x 4′, $40. SHIG OKADA, RE 2-9259.

PRESSURE COOKER, 5 qt., with instruction and recipe book, $8.50; TYPEWRITER TABLE, needs painting, $3.50. KAROLL SHURTZ, OS 6-0393. A

GAS RANGE, $20, Premier, good condition, $20. C. H. JONES, AX 3-0578. A

HUDSON, 1950 super 6, 4-door, new motor, overdrive, $395. STANLEY PAWLICKI, DA 6-5790. A

COMMUNICATIONS RECEIVER, like new, National, N.C. 98, receiver, cost $150; National matching speaker, cost $12; National, Select-O-Ject, for receiver, cost $38, all for $120. JOSEPH L. BOLT. PL 6-1800. A

CHEVROLET, 1946 4-door Fleetline sedan, $225. R. F. FUNDER, OR 7-8775.

FORD, 1947 convertible, needs only new top and paint job, $175. LUCILLE FRILOT, LO 8-7659. A

RUG, 9′ x 12′ gray cotton loop. Needs cleaning, otherwise in excellent condition, one year old, $20. CLIFFORD YIP, WE 3-2620. A

WINCHESTER .22 pump; 30-30 WINCHESTER lever action and 12 gauge BROWNING automatic. All in excellent condition. E. H. CROUCH. Write to Northrop News, Box 210. A

AIR CONDITIONER, refrigerant type Philco dry air ¾ h.p. (non-evaporative), A-1 condition, easy to install, $159. C. F. STINE, TE 2-0613. A

TV, 12″ console Motorola, good working condition, $25; Silvertone RADIO-RECORD PLAYER-WIRE RECORDER comb. with 4 1-hour spools, $90. DA 6-5897. A

REFRIGERATOR, 7 cu. ft., freezer, veg. crisper and veg. bin, excellent, $50. RONALD GOING, OS 6-6038. A

TV, 1953, 21″ Packard Bell table model with indoor antenna and swivel top table, blonde, $140. FLOYD WILTZ, PL 6-6070. A

GAS RANGE, Dixie, 4-burner, 1953 model, excellent condition, $65. B. BENNETT, OS 5-4131. A

HOUSE, 3 bedroom, 7 minutes from Northrop, near El Camino, R-1 Zone, $1900 down or $54 per month. Write to Northrop News, Box 208. A

LOT, level, Palos Verdes Estates, 7 minutes from shopping district, near golf course and playground, all improvements, underground electricity, $8450 less brokers commission to private individual. DON R. SMITH, GR 8-6392. A

SHOTGUN, 12 ga. Remington automatic, very good condition, $55; 12 ga. hammerless pump SHOTGUN, like new, $50. J. STRUNKA, DA 4-9552, after 6 p.m. A

WASHER, Bendix automatic, good working condition, reasonably priced. PL 2-9597. A

STUDEBAKER Champion, 4-door sedan, with overdrive, $45. GEO. S. BIERMANN, PL 5-9075. A

HOUSE, 2-bedroom, Compton (vicinity of Central and Olive), 5 years old, garbage disposal and panel ray heat, fenced yard, $9500, down paymen. and monthly payment open. R. H. BENTON, TO 7-7593. A

ANGLIA, '49, 2-door sedan, $175. L. R. FERGUSON, FR 5-7265. A

CHEVROLET, 1951, 2-door sedan, $650. J. L. STREEPER, OS 5-3045. A

LIVING ROOM SUITE, 3-piece, $35. GENEVIEVE COULSON, DA 9-1559. A

REFRIGERATOR, 8.5 cu. ft., Hotpoint, A-1 condition, $75. D. R. GUYSE, PL 1-9954.

PLYMOUTH, business coupe, 1950, $375. FR 4-1309, after 5 p.m. A

TYPEWRITER, portable Smith-Corona deluxe, unbreakable case, latest features, used very little, $50; RIFLE, Marlin, .22 bolt action, telescopic sight, like new; .22 Springfield AUTOMATIC repeater, best offer. Write to Northrop News, Box 215. A

PLYMOUTH, 1951, Cranbrook club coupe, Nylon tires. $625 or make offer. M. DENNIS, VE 9-2758. A

FORD CONVERTIBLE, 1949, customized, needs body work, $125. K. SUSTARSIC. Write to Northrop News, Box 216. A

OLDSMOBILE, '37, "6" coupe, $25. H. V. LARUE, OS 6-7671. A

FOR SALE

LAND, 1½ acres, 10 miles west of Palmdale, Leona Valley, paved street, 10′x20′ stucco cabin, small reservoir, redwood fence, fruit trees, full price $3497, $800 down, balance at $30 month. Cash, 10% less. FR 5-7023. A

MODEL PLANES AND EQUIPMENT, several of the smaller variety, also a few larger type; hand LAWN MOWER with catcher, make offer. L. R. WEISS, EX 8-0500. A

TV, 16″ GE, mahogany floor model, recently overhauled, good condition, $60 or best offer. W. R. CANNON, DA 4-8177. A

FORD, 1947, 4-door, super deluxe, factory rebuilt engine, 3 extra tires, $250 cash. CLAYTON C. ADAMS, DA 9-5804.

UTILITY TRAILER, 4′x7′ and hitch; 9′x12′ mildew-proofed new TARPAULIN; Vitar 35 mm. CAMERA, leather case and filter. NICK T. BRUEY. Write to Northrop News, Box 214. A

GERMAN PISTOL, P38, with holster, 2 clips and shells, like new, $40; ROLL-A-WAY BED AND INNER SPRING MATTRESS, used 1 week, $12. HAROLD E. EMBREY. Write to Northrop News, Box 213. A

HOUSE, 3-bedroom, $8900, $1500 equity, part on terms; payments $75 per mo., in 5 years drops to $51 per mo. J. B. McMANUS, DA 9-5764. A

WANTED TO BUY

BICYCLE, girl's 16″, with training wheels. PAUL W. RICKETTS, FR 5-5998. B

BICYCLES, boy's 16″, girl's 20″. B. P. BRADY, DA 9-5646. B

DINING ROOM SET, mahogany or walnut, with china cupboard; BOX SPRINGS AND MATTRESS, single. DA 9-3092. B

HOME MOVIE EQUIPMENT, 8 mm., camera, projector, screen, etc. W. LAMOREY, OR 2-7746. B

PHONOGRAPH, three-speed, console or table model, reasonable. MARLENE G. SPREITZER, OS 5-1098. B

FOR TRADE

IRONER, Kenmore Sears, $189 deluxe model, used very little, trade for piano in good condition. M. L. MORALES, PL 6-6518. C

AUTOMOTIVE EQUIPMENT, Crosley ring gear and pinion, drive shaft, headlights, bumper and guards, trade for Coleman 3-burner stove, lantern, other camp equipment. DONALD G. WILEY, PL 5-0239. C

FOR SALE OR TRADE

WILLYS, 1940 4-door sedan, sell or trade for reel type power lawn mower. OLLIE S. ALLEN, ME 3-0849, after 5:30 p.m.

SPORTS CAR, Kurtis Craft, 402 cubic inch Chrysler motor, won 1st place in hot rod and sports car shows. $3,200 or trade for lot or house in Torrance or Palos Verdes area. JACKIE THOMPSON, FA 8-7869. M

SOFA AND CHAIR, rose frieze in fairly good condition, $15. REX GAMBLE, FR 5-5782. M

HOUSE, 2-bedroom, 3 yrs. old, 10 min. from Northrop, 4¼% FHA loan.Total monthly payments including taxes and insurance are only $43, full price $9950, $3000 down or trade for 3 bedroom. D. LANGER, OS 5-1372. M

BOAT, 21′, 6 cylinder Gray marine engine, Fiberglass bottom, good cond., $700 or trade for '50 or '51 model pickup. D. M. MOLLE, ME 3-5995. M

MG TD, 1953, take over payments plus equity, would like to have another car in trade, owe $830 on it. LARRY DONVITO, LU 1-3995. M

RIFLE, Winchester automatic .22, will sell for $45 or trade for tilting arbor table saw or portable saw. D. J. QUINLAN, FR 5-3149 after 4:30 p.m. M

FORD, 1951 club coupe, $295 down, about $25 a month. VALERIA GIBSON, DA 9-6728 or FR 2-2929. M

HOUSE, 3-bedroom, Anaheim, 2 miles from Northrop plant, 6 mo. old, garbage disposal, 1½ baths, large patio, consider trading equity of same value in home nearer Hawthorne, $12,500, $2500 down. R. J. HALBERT, KEystone 3-1678.

VIEW CAMERA, 4x5, f 6.3 lens, Kodak shutter, film holders, dark cloth case; Solar model 120 ENLARGER, complete with 2¼ x 3¼ and 35mm carriers and lenses, $50; 9x12 CM CAMERA, f 4.5 lens, Compur shutter, ground glass viewing screen, cut film holders, film pack adapter, 5 Kodak developing frames, carrying case, lens hood, K2 filter. PL 4-1096. M

MAGAZINES: Pop. Science, Pop. Mechanics., Mechanix Illustrated, Science & Mech., Motor Trend, Motorsport, etc., new condition, many complete years. 5c each, entire lot for $5, or trade even for Model Airplane News, Air Trails, etc. R. T. HOOD, JR., OS 5-5229. M

LINCOLN, '47, 1948 Mercury engine; DISC RECORDER; Craftsman 10″ SWING SAW; HI-FIDELITY 2-way speaker system; 1.5 h.p. 110/220 volt MOTOR; 40-watt PA AMPLIFIER; or will trade for Kenmore gas clothes dryer, electronic test equipment, 15″ coaxial speaker, or nearly new vacuum cleaner. W. S. COOK, DA 6-2467, evenings or week-ends. M

FREE (To be given away)

SOIL, approx. 180 yards sandy loam free for the hauling. This is very good soil for applications requiring good drainage, such as bulbs, tubers, strawberries. R. E. KNOWLES, FR 2-9365. D

KITTENS, tortoise-shell and calico kittens, 10 days old. GL 4-2550, late p.m.

FORD BODY, 1937 tudor, A-1 condition, including rear end, can be towed. C. A. WINTERS, EX 9-3897. D

RENTALS OFFERED

BEDROOM, next to bath, quiet, private, no drinking, $10 per week or $40 month. GLADYS WOOD, PL 2-2685 or PL 9-2629.

APARTMENT, 2-bedroom unfurnished, garbage disposal, sun deck, 2 blocks from business section—ocean, Manhattan Beach; FURNISHED APARTMENT, knotty pine living room, tile shower, patio, close to business center. FR 5-4118. E

PRIVATE ROOM and bath, separate from house, $10 per week. BERNICE SATTERLEE, OS 6-8512. E

APARTMENTS, ready for occupancy, new 2-bedroom, tile and natural wood finish kitchens, garbage disposals, TV and phone jacks, free hot water, close to Northrop, $90 and $95 per mo. MARY A. ZALESNY, OR 1-2708. E

APARTMENT, nice one-bedroom furnished, within walking distance to Northrop, $60. ALICE F. COX, OS 6-5812. E

HOUSE, 4 rooms and bath, single garage, partly furnished, 1½ blocks north of Imperial Hwy., newly decorated, $70 per mo., water paid. R. A. AHRENDTS, OR 7-5674. E

SHARE HOME, share 3 bedroom furnished home in Morningside Park, 1 or 2 people. PL 4-8289 after 2 p.m. E

TRAILER SPACE, $16 per month, adults, no pets; furnished ROOM, kitchen, refrigerator, gas paid, adults, $10 per week. CLAUD O'BANNON. PL 5-9875. E

APARTMENT, 1 bedroom, hardwood floors, tile in kitchen and bath, garage, baby OK, $70, Prairie Ave. OS 6-7860.

APARTMENTS, $75, $90, new 1 and 2 bedroom, Westchester, unfurnished. PL 4-9763. E

APARTMENTS, furnished, in rear, utilities paid, North Inglewood, $12 and $15 per week. P. A. CRIBBY, OR 1-1662. E

APARTMENTS, new one and two bedroom, thermo heat, garbage disposal, garage, automatic washer and drier, children OK. Inglewood, $77.50 and up. L. M. KNIGHT, EX 6-6823. E

FURNISHED ROOM with separate bath and entrance, near Olympic and Western. RE 4-5330. E

APARTMENT, furnished, 1 bedroom, clean and modern, panel ray heat, $60 month. C. H. JONES, AX 3-0578. E

APARTMENT, modern, 1-bedroom, unfurnished. OR 8-2020. E

ROOM, large, kitchen privileges and bath, walking distance to Northrop, $10 per week. RICHARD S. DYER, OS 6-1852.

FURNISHED ROOM, near Western and Century, private entrance and bath, private heating unit, large walk-in closet, reasonable rent. PL 4-2458, evenings. E

APARTMENT, 1 bedroom, newly decorated, furnished, garage, suitable for couple, no children, no pets, Los Angeles, $65. W. LAMOREY, OR 2-7746. E

RENTALS WANTED

FURNISHED APARTMENT, kitchen and private bath, walking distance to Northrop, would share. FRANK VELLUTI. Write to Northrop News, Box 209. F

APARTMENT, for couple, no children, close to Northrop, no more than $75. VIRGINIA LINNELL, CR 4-9537. F

CHILD CARE OFFERED

CHILD CARE, ages 3 to 10 yrs., near schools, fenced yard, play equipment, hot lunches, snacks, naps if desired. 1 mile from Northrop. Day or night shifts. OS 5-7993. G

DAY NURSERY, ages 3 yrs and up. Close to school, fenced yard, balanced diet, naps if desired, licensed. OS 6-6566. G

CHILD CARE to age 3, days, 5 days week, $10. PL 7-1207. G

CHILD CARE, will care for one or two pre-school children in my home (day or nite shift), hot meals, fenced yard, plenty toys, play equipment. DA 4-4410. G

CHILD CARE WANTED

CHILD CARE WANTED, two school age children, live in 5 days, private room, evenings and weekends off, wages open. BERT ST. GEAN, GR 2-2346. H

LOST

ADDRESS BOOK, red, need badly. R. SHECHTMAN. Write to Northrop News, Box 207. J

FOUND

EYEGLASSES in pay parking lot east of Plant Two, Friday, August 26, noon. In maroon leather case, glasses have plastic rims on upper portion and gold bands on lower portion of lens. Can be claimed at Plant Security. K

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)
CRENSHAW & FLORENCE, Los Angeles 43. (Car pool considered.) GORDON A. BREMER (5360-39486, Ext. 1624). PL 8-0502. 12-1

(Zone 5)
COMPTON BLVD. & ACACIA., Compton. (Can pick up anywhere on Rosecrans) JODY E. CASSATT, (9320-27689 Ext. 2151). 12-5

(Zone 8)
PACIFIC COAST HWY., Lomita. (Will take 3 riders to and from work who live between Western & Prairie and as far as Pacific Coast Hwy.) CHARLES YAKIMOWICH (5503-18638, Ext. 2464).

(Zone 9)
TULITA & AVE. "F", Redondo Beach. (Tulita to Sepulveda, east to Hawthorne and north to Plant I and II.) B. J. DIXON (5586-22565, Ext. 2405). 12-9

(Zone 12)
CULVER BLVD. & INGLEWOOD AVE., or Washington Blvd., Mar Vista. (I now drive via Inglewood Ave., Jefferson Blvd., Centinella, Prairie, Century, Crenshaw.) NORMA CLARKE (5516-36713, Ext. 540 533). EX 8-1424. 12-12

7:30 a.m. — 4:15 p.m.

(Zone 4)
FIRESTONE & DOWNEY AVE., Imperial & Downey Ave., Downey. (Car pool desired.) JAMES F. LYNCH (3843-30089, Ext. 1345). TO 2-0108. 13-4

(Zone 4)
MAGNOLIA & BALL ROAD, Anaheim. (From any section in Garden Grove or Anaheim, other member of pool lives near Chapman & Magnolia — car pool desired.) JOHN O'LEARY (9320-27710, Ext. 2151). 13-4

(Zone 5)
ANAHEIM AREA. (Near Lincoln and Magnolia, car pool desired.) A. C. LITHER-EDGE (3473-34073, Ext. 2655). 13-5

FREDERICK DR. & 9TH ST., Garden Grove. Additional members wanted for car pool.) JACK CROSS (5128-28603, Ext. 2315). LEhigh 9-9629. 13-5

(Zone 7)
VERMONT & 182ND, Gardena. GRACE HAZLETT (4100-13375, Ext. 2331). DA 4-6046. 13-7

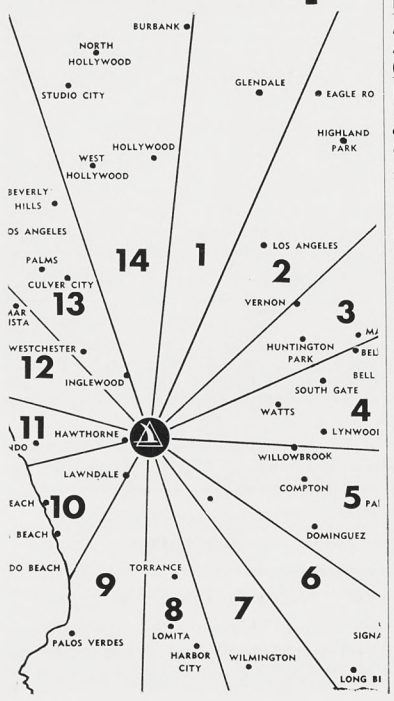
(Zone 10)
NORTH REDONDO BEACH AREA. (Will pick up in North Redondo on Redondo Beach Blvd., also on Prairie Ave., north of Redondo Beach Blvd.) DAN CARY (5940-33277, Ext. 2661). FR 9-9573.

(Zone 11)
GRAND AVE. & MAIN, El Segundo. (Drive out El Segundo Blvd. to Hawthorne; ride preferred or car pool.) NOMAN (5960-39258, Ext. 1458). EA 2-1527. 13-11

7:30 a.m. — 5:15 p.m.

(Zone 6)
LONG BEACH BLVD. AND CARSON Long Beach (Will pick up rider(s) along route: 174th St. (Artesia Blvd.) to Crenshaw, up Crenshaw to Plant 1 or car pool). GORDON D. MADISON (3315-12917, Ext. 414-460). L.B. 401-835. 14-6

Zone Map



RIDES OFFERED

3:45 p.m. — 12:15 a.m.

(Zone 5)
ROSECRANS & PIONEER, Norwalk. OTTO EBNER (5445-17439, Ext. 1926). TO 3-9542. 16-5

4:45 p.m. — 1:15 a.m.

(Zone 4)
ORANGETHORPE & WOODS, Fullerton. (Car pool considered.) EUGENE J. SNELLER (5587-23124, Ext. 2750). LAmbert 5-8729. 18-4

(Zone 13)
LENNOX & PRAIRIE AVE., Inglewood. (Will pick up anywhere in Inglewood or Lennox.) FRANK A. MANSANARES (5584 22114, Ext. 1381). 18-13

(Miscellaneous—Split Shift)

(Zone 8)
SEPULVEDA AND ARLINGTON, Torrance. (Car pool desired, Mariposa—hours: 7:15 a.m. to 4:00 p.m.) JACKIE THOMPSON (6200-39468, Ext. 3-241). FA 8-7869.

Rides Wanted

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)
VICTORY & HOLLYWOOD WAY, Burbank. STEPHEN T. SAWYER (5503-38879, Ext. 2681). TH 4-2852. 2-1

(Zone 5)
ROSECRANS & ATLANTIC, Compton. (Would like to be taken to Clark & Atlantic.) MARIE KERNES (5507-34895, Ext. 256). NE 1-2120. 2-5

OLIVE & LONG BEACH BLVD., Compton. JEFF TER KEURST (5231-38922, Ext. 2766). NE 8-2626. 2-5

COMPTON BLVD. & PEARL ST., Compton. (Intersection corner by Glen Orgen Ford.) ROBERT MANDES (5373-33164, Ext. 552).

(Zone 6)
COMPTON & WESTERN, Gardena. (If possible from Halldale & Compton.) RICHARD D. TIMOTHY (5360-39487, Ext. 1624). 2-6

PACIFIC AVE. & 38TH ST., San Pedro. (Or 38th & Gaffey St.) FLOSSY POTTORFF (5509-19971, Ext. 2075). TE 2-5452. 2-6

(Zone 7)
WESTERN and 174th ST. (Gramercy and 174th St. off Western towards Crenshaw) Torrance, NENNETTE M. GRAVES (5351-38639, Ext. 2582). DA 4-9097. 2-7

WESTERN & 180TH, Gardena. R. A. BARBER (7220-29174, Ext. 2243). DA 4-6216.

(Zone 9)
PRAIRIE & REDONDO BEACH BLVD., Torrance. MARIE HANSON (5507-39518, Ext. 526). FR 9-8389. 2-9

(Zone 10)
AVIATION & MANHATTAN BEACH BLVD., North Redondo Beach. (Located midway between Aviation Blvd. & Inglewood Ave., off Manhattan Beach Blvd.). W. C. BOYERS (5501-17585, Ext. 2200). FR 2-6537. 2-10

AVE. C and HIGHWAY 101, Redondo Beach, VALERIE GIBSON (5351-35536, Ext. 2582). DA 9-6728. 2-10

MEYER LANE & 190TH. near Inglewood Ave., Redondo Beach. VERA RIDEOUT (9320-27694, Ext. 2151). 2-10

RINDGE & CARNEGIE LANE, Redondo Beach. (Prefer to be picked up at Rindge & Carnegie Lane but will consider Rindge & Redondo Beach Blvd.) MARVIN McAFEE (5373-38206, Ext. 552). FR 4-5387.

(Zone 12)
FREEMAN & LENNOX AVE., Lennox. (Could meet at Freeman & Imperial or Inglewood & Lennox Aves.). HARRY J. NIKKEL (5508-19565, Ext. 2764). OR 7-0402. 2-12

CULVER BLVD. & INGLEWOOD AVE., or Washington Blvd., Mar Vista. (I now drive via Inglewood Ave., Jefferson Blvd., Centinella, Prairie, Century, Crenshaw.) NORMA CLARKE (5516-36713, Ext. 540, 533). EX 8-1424. 2-12

(Zone 13)
CENTURY & FIRMONA AVE., Lennox 2. OSCAR J. FLUHRMANN (5516-36447, Ext. 2745). OR 7-5712. 2-13

(Zone 14)
48TH ST. & 3RD AVE., Los Angeles. J. B. LOVE (5160-14507, Ext. 548). AX 3-0986.

SLAUSON & LA BREA, Los Angeles. PAUL SCALLY (7340-39515, Ext. 523). AX 2-9642. 2-14

TUJUNGA AVE. or COLFAX AVE. & RIVERSIDE DR., North Hollywood. W. L. EGGLESTON (5587-22892, Ext. 2750).

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 4)
FIRESTONE & DOWNEY AVE., Imperial & Downey Ave., Downey. (Car pool desired.) JAMES F. LYNCH (3843-30089, Ext. 1345) TO 2-0108. 3-4

MAGNOLIA & BALL ROAD, Anaheim. (From any section in Garden Grove or Anaheim, other member of pool lives near Chapman & Magnolia — car pool desired.) JOHN O'LEARY (9320-27710, Ext. 2151). 3-4

(Zone 5)
EL SEGUNDO & VERMONT, Gardena. MARION KAROW (4220-13604, Ext. 1452). DA 9-4240. 3-5

ANAHEIM AREA (Near Lincoln and Magnolia, car pool desired.) A. C. LITHER-EDGE (3473-34073, Ext. 2655). 3-5

WOODRUFF & DEL AMO or Bellflower & Del Amo, Lakewood. VERELENE ZELESKE (9200-27602, Ext. 2177). L.B. 5-7524. 3-5

ROSECRANS & ATLANTIC or Long Beach & Atlantic, Compton. (Ride wanted between Sept. 26 and October 7, while my ride is on vacation.) CURTIS McCARTY (9350-1-38898, Ext. 1674 or 474). 3-5

FREDERICK DR. & 9TH ST., Garden Grove. Additional members wanted for car pool.) JACK CROSS (5128-28603, Ext. 2315). LEhigh 9-9629. 3-5

(Zone 8)
BETWEEN SEPULVEDA BLVD. & LOMITA BLVD. off Western, Torrance. (Need ride desperately! Anyone coming out Western Ave. from Long Beach, Lomita, Harbor Hills, San Pedro, Wilmington or Palos Verdes.) D. D. BUCKALEW (1422-14472, Ext. 696). DA 6-2820. 3-8

(Zone 9)
AVENUE D & HIGHWAY 101, Redondo Beach. DONNA WILLIAMS (5152-14499, Ext. 1753 or 1754). FR 5-9457. 3-9

(Zone 11)
GRAND AVE. & MAIN, El Segundo. (Drive out El Segundo Blvd. to Hawthorne; ride preferred or car pool.) NORMAN (5960-39258, Ext. 1458). EA 2-1527 3-11

GREVILLEA AND 120TH STREET, Hawthorne, BETTY ECKMAN. (1421-38944 Ext. 693) OS 6-7689. 3-11

(Zone 12)
CENTURY BLVD. & EUCALYPTUS, Inglewood. (Street address located between 98th St. & Century Blvd.) VI BODDY (7360-27158, Ext. 1805). OR 7-6948.

(Zone 13)
BALBOA & VAN OWEN or Sherman Way and Sepulveda, Van Nuys. (2 girls, one with car able to share driving or meet at any convenient place.) ESTHER KINNEY (9330-27751, Ext. 1471). 3-13

(Zone 14)
LA BREA & 4TH ST., Los Angeles 36. MARK A. STERN (3464-30913, Ext. 2666 or 2188). WE 8-1833. 3-14

3:45 p.m. — 12:15 a.m.

(Zone 1)
NORMANDIE & SANTA BARBARA, Los Angeles. JOE O. ROGERS (5445-38804, Ext. 2226). AX 1-2474. 6-1

(Zone 2)
CRENSHAW BLVD. & W 109TH ST., Inglewood. (Car pool considered.) HOWARD FALLEN (5501-39129, Ext. 2200 or 1814). OR 2-8319. 6-2

(Zone 8)
BURIN AVE. & 145TH ST., Lawndale. WALTER DODSON (5406-32, Ext. 2220). OS 6-5008. 6-8

(Zone 12)
CENTURY BLVD. & LOWER MANCHESTER, Inglewood. ALFRED J. TURMENNE (5336-39528, Ext. 2256 or 5501). 6-12

4:45 p.m. — 1:15 a.m.

(Zone 1)
WESTERN & 39th ST., Los Angeles. VAN O. PENMAN (5503-36037). AX 2-2040.

(Zone 2)
JEFFERSON & GRIFFITH, Los Angeles. LARRY WILLIS (5583-39069, Ext. 2097). AD 4-5727. 8-2

(Zone 6)
SANTA FE AVE. & PACIFIC COAST HWY., Long Beach. ROBERT F. HUGHES (5508-19754, Ext. 1333). 8-6

(Zone 11)
ISIS & 124TH PL. (1 block east of Aviation), Hawthorne. GERALDINE TOOMEY (5621-38477, Ext. 2649). OS 6-2386.

(Miscellaneous—Split Shift)

(Zone 1)
COLORADO & BRAND, Glendale. (I could drive to location to meet a driver coming from Burbank on Hollywood; hours: 6:45 a.m. to 3:30 p.m.; could work 7 a.m. to 3:45 p.m.—Mariposa.) IRENE GIVERINK (6200-38946, Ext. 3-641). FR 4-3748. 10-1

(Zone 8)
SEPULVEDA AND ARLINGTON, Torrance. (Car pool desired, Mariposa—hours: 7:15 a.m. to 4:00 p.m.) JACKIE THOMPSON (6200-39468, Ext. 3-241). FA 8-7869.

(Zone 9)
DOTY OR KORNBLUM, Hawthorne. (Doty is one block east of Prairie and 145th St. is 3 blocks south of Rosecrancis. Mariposa—hours: 7:15 a.m. to 4:00 p.m.) DOROTHY THOMPSON (1421-12203, Ext. 1239, 1264, 408). OS 5-6769.

(Zone 10)
BAYVIEW DR. & 16TH, Hermosa Beach. (Hours: 7:15 a.m. to 4 p.m.) CARMELLA PARRILLI (6630-38945, Ext. 261, 262, 263). 10-10

Sweepstakes for Ontario

ONTARIO ROCKHOUNDS had reason for rejoicing when their NRC Prospectors' Club won sweepstakes award for display of gems and minerals at Ontario Community Fair. Display is subject of discussion among Cliff Baker, Quality Control; Jim Edwards, Production; and Chester Poole, Production Planning.

Headlines for 1954-55 Tell Story of Progress

Volume 13, just past, reflected in News pages—for 26 issues—a swiftly moving series of events.

Twenty-six issues ago these pages were telling of the first flight of a Scorpion from Hawthorne to Palmdale . . . of the second birthday of the Northrop Retirement Plan . . . and of the beginning of construction on an addition to Maple Street.

August, 1954, issues related that F-89s were being based in Greenland . . . that the News had won a state award for distinguished service at the California State Fair . . . and that Vice-President John R. Alison was the new president of the Air Force Association, and Gil Nettleton the prexy of the Night Fighter Association . . . Fred Baum, Dayton, was named an assistant secretary of the company . . .

Succeeding pages explained a new system in badges for Norcrafters . . . the impressive decrease in cost of producing the airplane . . . the NRC Fashion Show for distaff Norcrafters.

The U.S. Bond drive was announced with a flourish in October, with following issues relating, in turn, the spectacular response of Norcrafters. (Scores of departments, from every plant and facility, proudly displayed the 100 per cent participation sign. Success of the drive aroused nationwide interest.)

Norcrafters read with pride that flight safety awards had been won by two Air Force organizations using Scorpions . . . They scrutinized with interest the details of the upcoming NRC all-plants Private Party . . . .

A general pay boost in December provided pleasant reading for Norcrafters, as did the announcement of the traditional Northrop year-end holiday.

Opening issues in 1955 noted another News-won award—this from the Los Angeles Chamber of Commerce for top community relations reporting.

President Collins congratulated Safety-Conservation Norcrafters for their activities . . . Robert R. Miller was named vice-president . . . Colonel Stapp went 632 miles per hour on a Northrop-built rocket sled (and tipped his hat to Norcrafters for their help) . . . The company announced a further advance in group insurance.

Words and pictures marched across the pages in March and April to mark the first birthday of Palmdale . . . the award of a sub-contract from McDonnell . . . the election of Scotty Smith as president of the Management Club . . . the determination of the company to achieve compactness and efficiency (and thus to become the best in the industry) . . .

Further along, the Machine Shop cagers took the plant championship . . . new Civil Defense plans were announced . . . the last D-series fly-away from Hawthorne to Palmdale . . . the enrollment in AID . . . additional sub-contracts . . . and the news that Norcrafters had met schedules for almost three years running.

As the newspaper-year drew near its close, other developments caught the reader's eye—appointment of Vice-Presidents Alison and Miller to new duties, and the naming of Gil Nettleton to a new post . . . F-89 transportation savings . . . a big award winner in Suggestion Award (Ed Bueltel) . . . a top-level sales meeting.

And only in the past two issues Norcrafters read of Northrop's El Paso plans . . . of the organization of a Corporate Planning department . . . and of the Phase One long-range interceptor contract . . .

The purposeful activity continues, with highlights of the coming year yet to find their place in these pages. The past presages a highly active future.

RIDES WANTED

(Miscellaneous—Split Shift)

(Zone 13)
LA BREA AND HARDY ST., Inglewood. GRACE L. STURGILL (6270-13918, Ext. 614). OR 2-6360, 4:00 p.m. to 12:30 a.m. 10-13

(Zone 14)
CRENSHAW BLVD. & 60TH ST., Los Angeles. Mariposa: hours, 4:00 p.m. to 12:30 a.m.) DICK GUERENA (6230-39498, Ext. 541). 10-14

Buy Bonds

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening 7:00 p.m.

ART CLUB (nights)
Meet in Annex every Thursday from 1:00 to 3:00 p.m.

BADMINTON, Ed Sellon
Meet at Leuzinger High School Gym every Tuesday evening 7:30 p.m.

BIBLE STUDY, Roy Stahl
Meet daily, Plant 1, east mezzanine conference room 11:30 a.m.; Plant 11, second floor, center conference room, 12:00 p.m.; Plant III, conference room, 11:00; Nash Building, 12:15.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Ralph Vincent
Winter leagues now forming.

BOWLING (nights), Garland Steiner
Winter leagues now forming.

BRIDGE CLUB, Walt Darby
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Robert Carberry
Meet every other Friday evening, 7:30 p.m. Next—Sept. 16.

CAMERA CLUB (nights), Gene Beck
Meet every other Saturday 7:30. Next—Sept. 17.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF, Andy Titus
NRC Open Tournament, Baldwin Hills Country Club, October 9 and 16. Entry blanks available Personnel Activities.

GUN CLUB (days), Dick Booth
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—Sept. 26.

MIXED CHORUS, Florence Graveline
Meet every Wednesday evening, 7:30.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Bill Kappele
Meet 1st and 3rd Tuesday of each month at Annex, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller Skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Friday after work (1:30 a.m.)—Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday, Long Beach Gun Club, 10:30 a.m. Next—Sept. 17.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month for summer.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING CLUB (nights), Tex Hylton
Meet 3rd Wednesday of month, 1:00 p.m.

SOFTBALL (days), Dave Heaps

SOFTBALL (nights), David Carney
Black Bat Tournament playoffs now in progress.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays. Beginners' class will start on Sept. 18.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Bill Steffen
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ward Newton
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins
Openings available winter leagues.

DINNER CLUB, Hazel Stewart
Monthly dinner meetings.

INTERIOR DECORATION
Weekly meetings will resume this fall.

SENIOR GIRL SCOUT TROOP (Mariners), May Hawkins
Swimming, boating and seamanship. Meet Thursdays, 7 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Vi Murphy
Meet first, third Thursdays, 7:30 p.m.

SPORTS

The Northrop News

Pre-race Lineup

SPEARHEADING Arrowhead Upsanddowns—. It was great day for Norcrafters at recent Arrowhead Foreign Car rally. With six Northrop cars competing in 94-car field, final tally showed Northrop five-car team in first; one Northrop car on team taking second; Northrop drivers and navigators taking trophies for 2nd, 4th, and 6th overall. Pictured: Hal Knopp, Harold Guess, Doug Hugill, Dick Flude, C. K. Enoch, Betty Enoch, Jack Kirkpatrick, Earll Brown, Bill Hanna, Silvia McKinney. Not in pic: Dave Conklin and Karl McCready, who competed for San Diego.

Sports Car Rally Nets High Total

The NRC Sports Car Club is developing some real sharpies in the rallying game. In the recent Arrowhead Foreign Car Club rally—which started at the Rose Bowl in Pasadena, to Glen Ranch, across Cajon Pass to Lake Arrowhead, and ended at Club Oaks near San Bernardino—the final tally netted five trophies for the six Northrop cars in competition.

The first place team trophy went to the five-car Northrop team composed of Earll Brown and Jack Kirkpatrick, who also took a trophy for second overall; Betty and C. K. Enoch — who took fourth overall; Dick Flude and Doug Hugill—sixth overall; Harold Guess and Hall Knopp; and Silvia McKinney and Bill Hanna. On the San Diego Sports Car Club team—which took the second place team trophy—were Norcrafters Dave Conklin and Karl McCready.

Next major event on the club calendar will be the Sand'n Stars rally at Palmdale on September 17. It is scheduled to be a night-desert time and distance rally starting Saturday evening and ending early Sunday morning. Starting place is the NRC Clubhouse at Avenue Q and 30th street East, Palmdale. Drivers' meeting will be at 9:30 p.m.; first car goes out at 10:00 p.m.

The first car should finish at approximately 5:00 a.m., at a spot where arrangements have been made with a restaurant to be open for breakfast. All sports car enthusiasts are invited.

Boat Club's Catalina Cruise Termed "Best"

"A cruise to surpass all previous island summer cruises," was the word received from Ed Freitas, NRC Boat Club commissioner, regarding the Labor Day weekend cruise of the NRC Boat Club to Catalina.

One hundred and fifty Norcrafters, families, and guests crossed the channel in forty boats of all types, ranging from a 14-foot outboard cruiser to 40-foot sailboats.

The sailors cast off from the San Pedro breakwater on Saturday morning and sailed to the Isthmus, Santa Catalina Island Clubhouse. They returned on Monday morning.

Winners in the various sporting events on the island during the holiday were: women's dinghy race, won by Marcia Clisby; men's dinghy race—Robert Skipper; women's swimming race—Gloria Low; men's swimming race—Jack Cohan; fishing contest—Bob Mordue; predicted log race—Harold Senter; treasure hunt — Marie Floore. All winners received NRC trophies.

The next big event on the Boat Club agenda will be the annual Beachcombers Dance to be held on November 5. Preparations are now being made for the event to be held at the NRC Clubhouse Annex. John Herrick and his orchestra are scheduled to provide entertainment and music.

NRC Clubs in Recent Adventures

By HAL HUNSBERGER
President
Northrop Reception Club

The "safety in numbers" theory of the NRC Boat Club's cruise program paid off for Steve Sabo during the Boat Club's Labor Day cruise to Catalina. Power plant failure stranded Steve's small cruiser on the briny deep during the return trip. Luckily, there was a Club boat on hand to throw him a line for a tow home. Thus—no calls for the Coast Guard—and no worries.

★ ★ ★

The recent Sports Car Arrowhead rally was full of thrills and chills for the competitors.

The event itself was a thrilling one and the NRC Club turned out to be tops in the competition—see the story on this page. The chills came when the race was cut short by rangers at Crestline near City Creek because of a dangerous forest fire raging in the area.

TIME NOW FOR HOOPSTER PLANS STATES COMISH

Hoopsters attention!

NRC Basketball Commissioner Walt Knox announces that the NRC basketball season is only about a month away and advises all Norcrafters interested in the sport to contact the Personnel Activities office for information.

Managers should start lining their teams up now, says Walt.

Information on manager's meeting schedules and roster deadlines will be announced in forthcoming NRC bulletins and in future issues of the Northrop News.

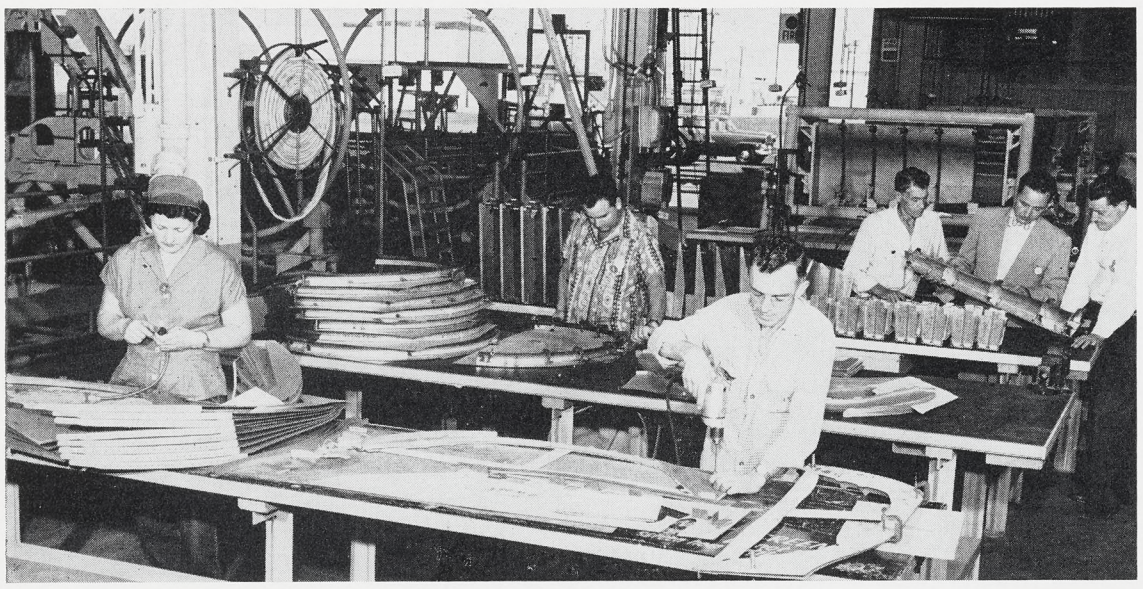
Summer Bowling Winners

MIXED SCRATCH—. Trophy takers in the mixed scratch foursome bracket are, front row left: Tom Haymer, most improved bowler; Woody Howsare, men's individual series. Back, left: Neil Elder, men's individual game; Jean Lambert, women's individual game; Florence Rice, women's high average; Jerry Vierling, who posted the women's individual series.

BOO BOOS—. Finance division summer bowling league mixed foursome winners — the Boo Boos — are pictured from left: Paul Bortner, Chuck Geronimi, Peggy Bortner, Nora Donnici. League competed for NRC trophies at Windsor Bowl. Winter bowling leagues are now in progress and openings are available in most leagues. Night shift leagues are also open.

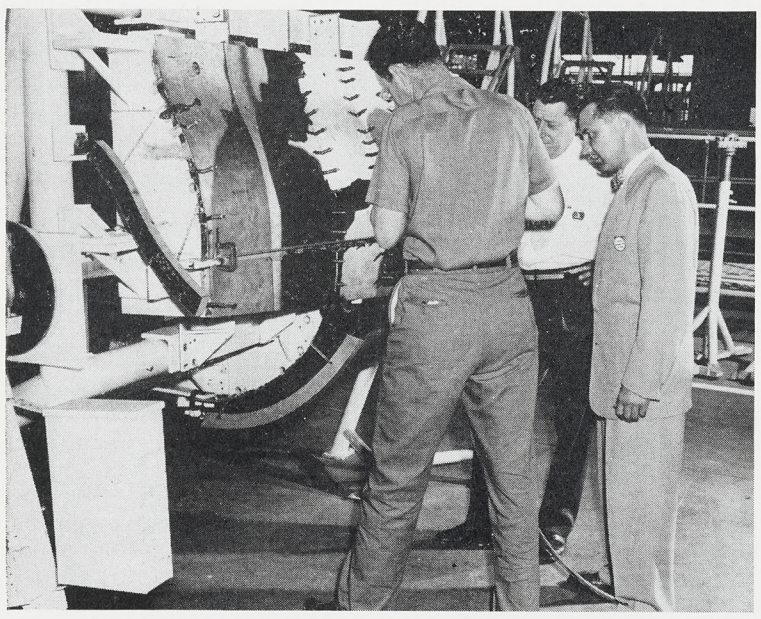
THE Northrop Scene BY DAY AND NIGHT

Co-operation Marks McDonnell Jobs



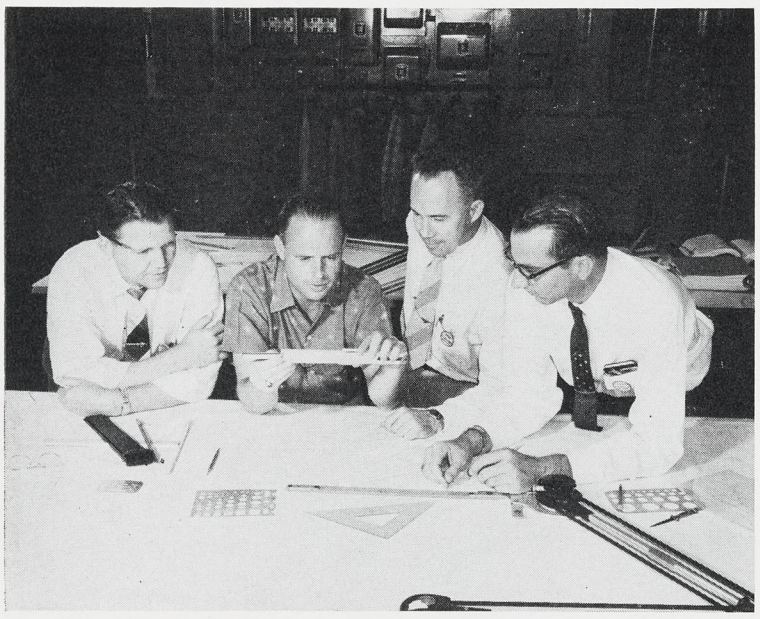
ON SCHEDULE—. Fabrication of various McDonnell F-101 assemblies goes on according to schedule. In foreground: Norcrafters Marie Hoff and R. D. Clendenin. Center: Sam D'Angelo. Rear: Leadman T. H. Osborn, McDonnell rep Clyde Rockey, and Foreman L. H. Shutts. Much of McDonnell sub-contract work is on titanium, hard material calling for adoption of new processes. Story—page one.

MEETING OF MINDS—. Roy Prueter, Northrop subcontract project superintendent and Clyde Rockey, McDonnell resident representative, occupy adjoining offices in Plant One, can readily consult each other on short notice. Present McDonnell work at Northrop consists of fabrication of aft center fuselage sections for highly acclaimed F-101 Voodoo fighter aircraft.



WELL ON WAY—. Aft floor assembly fixture is well on its way to completion in this photo, which shows Quent Langland operating drill, while McDonnell's Rockey and Norcrafter Shutts pause briefly to comment on progress. Performance on initial quantity has greatly increased possibility of follow-on subcontract orders for McDonnell Voodoo production.

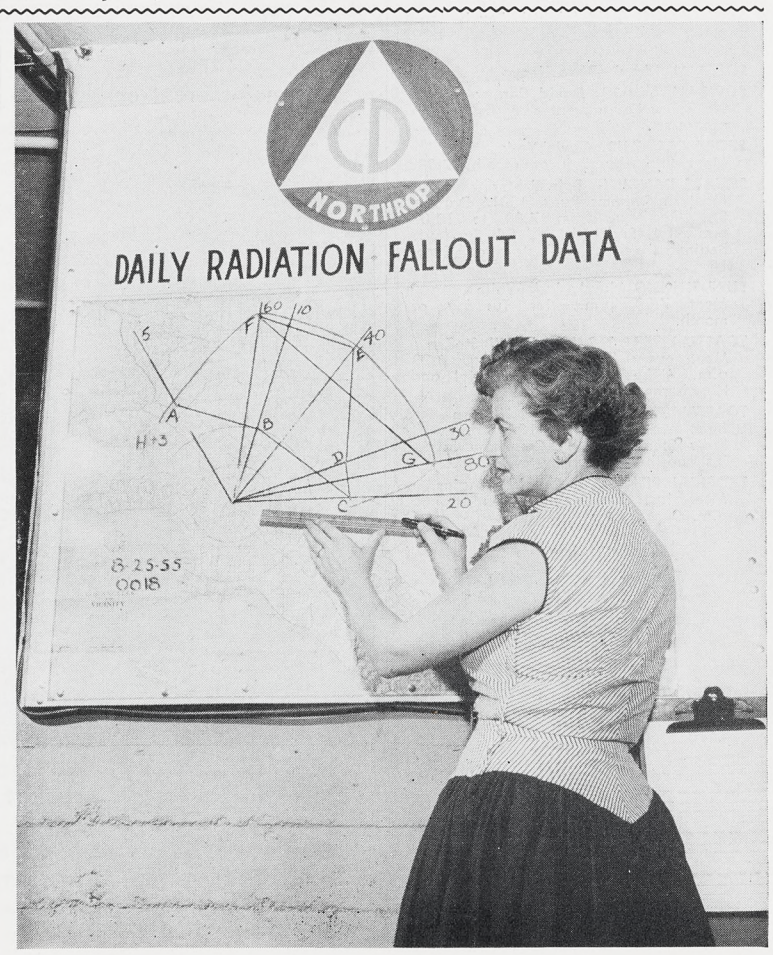
EXHIBIT A—. McDonnell Aircraft representatives observe work on keel assembly of F-101. From left: Emmet Fink, tooling representative; Julian Kay, engineering rep; Douglas Ball, quality control rep; Clyde Rockey, resident representative (all from McDonnell); E. H. Nichols, Northrop Inspection; and J. W. Harmon, McDonnell quality control. Operator is J. K. Miller; pointing out operation is L. M. Shutts, foreman in Department 5561 (McDonnell F-101 Sub-contract). Teamwork between McDonnell and Northrop representatives assures top quality of product.



FIGURES CHECK—. Brief conference assures accuracy as engineers interested in McDonnell design project consult the slide rule. From left: H. R. Peterson, Clyde Mees, Don Armstrong, and Forrest W. Blanton. First three named are Norcrafters (Armstrong is project engineer). Blanton is engineering rep from McDonnell. Elmer Vogel is resident engineer for St. Louis firm, and two other engineers, Leonard Boskamp and E. T. Kisselburg, round out the McDonnell four-man staff on design sub-contract here.

Fall-out Data For C-D

LATEST measure taken by Northrop Civil Defense Office to assure maximum protection to Norcrafters is installation of radio-active fallout pattern map shown here, with May Hawkins marking latest reading. Meteorological data from Weather Bureau is supplied through Hawthorne Police teletype twice daily; wind speed, direction at various altitudes allows prediction of fall-out pattern of radio-active particles around any critical target area.



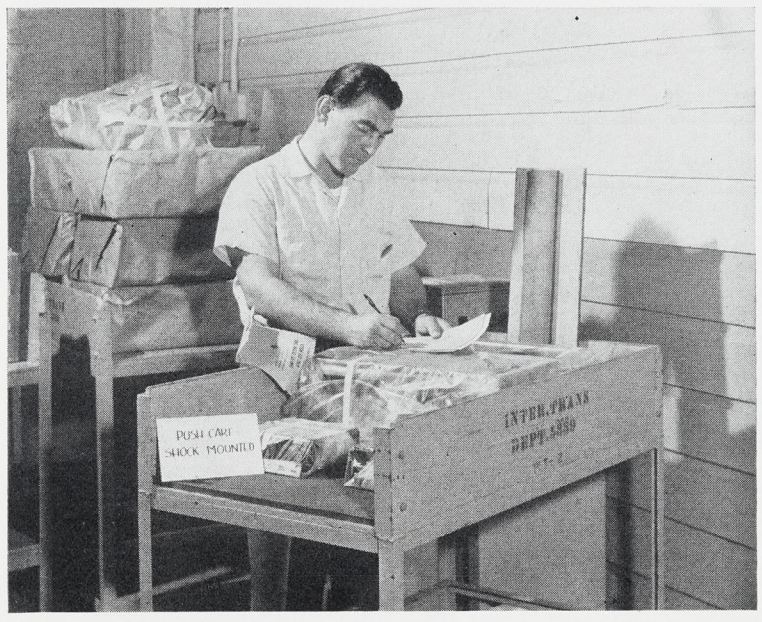
Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, September 28, 1955

BBSF Classifieds
(See Page Three)

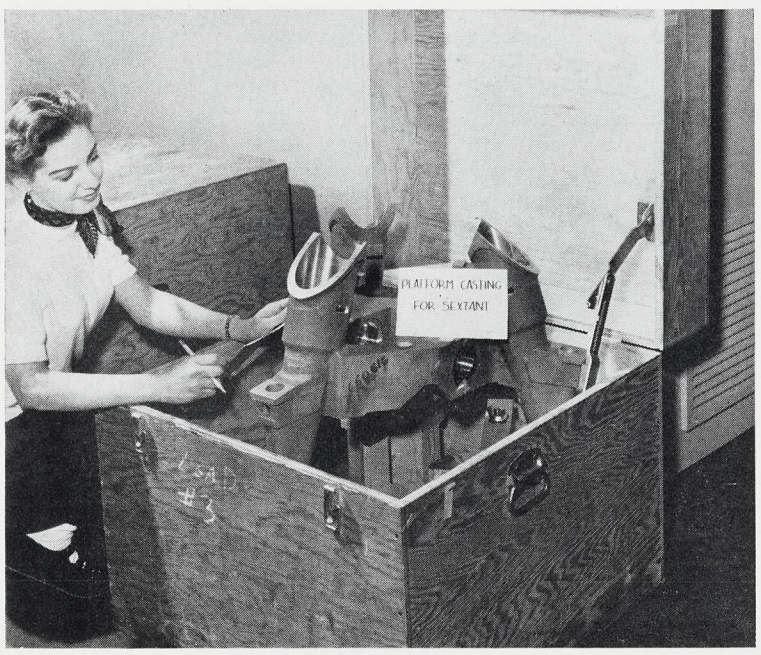
Going My Way
(See Page Four)

Protection for Parts



SHOCK-MOUNTED pushcarts are used by Electro-Mechanical Control Norcrafters to move fragile Snark parts from place to place in Plant Two. W. G. Brown checks out items for protective wrappings. Note thick rubber pad on bed of cart. Story at right.

BEFORE parts move to assembly areas, control booth operators like Mildred Smith, Electro-Mechanical Control, examine them to make sure packing regulations are followed for damage prevention. Lab stock items like electronic tubes are left in original boxes.



TOTE BOXES, specially built, are utilized for transport of delicate instruments. Dolores Perry, control booth operator in Plant Two Machine Shop, sees that instrument is properly stored, signed out. If shipment does not meet the requirements, it is halted.

DELICATE MISSILE PARTS GIVEN SPECIAL HANDLING

MC Annual To Feature Top Speaker

Several hundred Management Club members and their wives or guests are expected to attend the annual dinner-dance on October 15 in the Embassy Room of the Ambassador Hotel.

The occasion—top social event of the MC calendar—has followed the traditional practice of obtaining a top-flight speaker. This year it will be Dr. John F. Victory, executive secretary of the National Advisory Committee for Aeronautics.

In addition to the featured talk, there will be a free raffle for $200 worth of prizes selected with the women primarily in mind.

A 7:00 p.m. cocktail hour precedes the 8:00 o'clock dinner. Dance music following the program will be provided by Don Ricardo's orchestra, which furnished music for last year's dinner-dance in the same Embassy Room.

Invitations have been mailed to homes of members, with Elise Williams, ticket chairman, urging the early return of ticket applications. She has also announced to members that reservations for tables will be made for parties of ten upon notification.

The guest speaker, Dr. Victory, is the first employee of NACA, having started his career with that organization in 1915. He is presently a director and chairman of the executive committee of NACA, in addition to holding down the duties of executive secretary.

The holder of a number of college degrees, Dr. Victory is also a member of the Collier Trophy and Wright Memorial Trophy committees, which annually bestow honors on outstanding contributors to the field of aeronautics.

MC MAILINGS

Management Club members who have not received ticket reservation forms for the annual dinner-dance have been requested by MC President Scotty Smith to contact the club's membership chairman, Lloyd Johnson, Department 5354, Zone 21.

"There is a possibility that transfers and location moves have delayed delivery," Smith said. "This would be a fine opportunity for members who have moved to correct their in-plant mailing addresses on the Management Club list."

PROTECTION FOR QUALITY

The quality workmanship and skill that go into complex Snark assemblies is getting care of especial nature in transit from department to department, and plant to plant.

Cooperation among Electro-Mechanical Laboratories, Internal Transportation, and Manufacturing Control has resulted in methods providing maximum reliability in the handling of delicate electronic equipment and precision machined parts, especially in the environs of Plant Two.

Extent of the reliability is shown by Quality Control examinations: — with an average of slightly more than 12,000 parts stored in Electro-Mechanical Control (5339) stockrooms, a monthly average of only six items has been found improperly stored!

In familiar terms, that record exceeds the well-known advertising claim of 99.44 per cent purity — the Norcrafters in Plant Two have rung up a percentage of 99.95!

Training of Manufacturing Control personnel and the use of specialized hauling units account for the remarkable record.

Norcrafters who will handle the delicate missile parts in the stockroom or in transit pass through a two-week familiarization course. At all times the new hire is accompanied by one who has been on the job for some time. The latter familiarizes the new Norcrafter with routes and the proper way to operate equipment in order to provide maximum safety to persons, parts and machines.

A second phase follows for personnel assigned to work with special handling fixtures and equipment. The coaching of new by old succeeds to the extent that the well-indoctrinated Norcrafter will not move fragile parts unless they are properly protected.

Drivers of vehicles, although they may be in Manufacturing Control departments, are required to satisfy the same safety requirements applied to Internal Transportation drivers. (The latter move equipment from plant to plant; Manufacturing Control moves it within Plant Two.)

Tote boxes have been furnished by Electro-Mechanical Labs for the carrying of electronic and highly machined items. Shock mounted carts, with rubber-tired wheels and rubber pads and rollers, provide smooth, bumpless transportation for the complex equipment. Special boxes hold delicate instruments and gauges securely in place while being moved. And a special truck, padded for shock absorbency, is assigned to Electro-Mechanical Control for transportation of parts from Plant Two to El Segundo Building 21.

In the case of electronic tubes, delivery is made directly to Electro-Mechanical Labs, with the items left in original containers. The system not only eliminates extra handling, but also takes advantage of the built-in security offered by original covers.

The program of information regarding handling is an endless one, Manufacturing Control reports, with periodic refresher courses provided for personnel.

Thus Norcrafters keep abreast of improved methods, and they receive training promptly in the use of new equipment.

Inter-Plant Cooperation Marks Test Unit Project

Cross-country cooperation and fast, efficient production operations highlighted the recent completion of a flight control subsystem test unit in Plant Two.

Electro-Mechanical Laboratories personnel cooperated with Florida Norcrafters to make the unit in 79 days, working with advance design information so that fabrication and design were completed on the same date.

Operations began, Bob Hall, chief of Electro-Mechanical Labs, said, when the Guidance and Electronics group in Florida under L. H. Brennwald expressed the need for an easily operated, movable test unit for flight test operations.

Frank DeBarry, formerly of Tool and Test Fixtures Engineering (5960), went to Florida to study and analyze the proposed unit design. There Bob Emerson had been assigned to the project.

Design of the unit then fell into the hands of the two men mentioned, along with Dick Warner, Florida, and Tom Bilbo and Stan Bresenoff, of Tool and Test Fixtures Engineering.

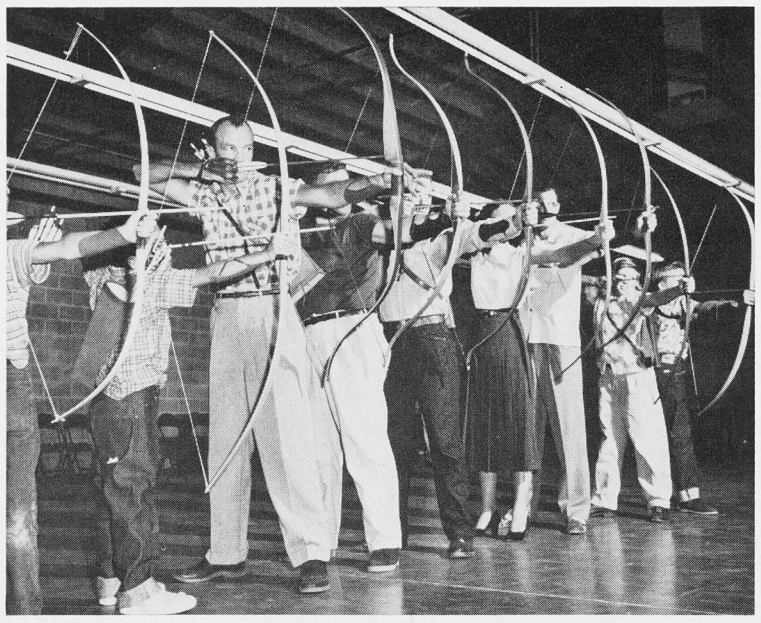
Fabrication of the unit began almost immediately, without the usual wait for blueprints. Advance design data were fed into the most suitable shops, so that building kept pace with design.

Electro-Mechanical Departments 5910, 5920, 5930, 5960, and 5970—plus Jig Construction (5411), Welding Shop (5502) and Missile Inspection (7510)—carried most of the load.

The unit, used in testing highly classified assemblies, was delivered to Florida late last month, in time to support the missile launching program.

It has fulfilled its promise of maneuverability, ease of operation, and accessibility.

Palmdale Section



MEN, WOMEN, KIDS TOO, have been out for recreational bullseyes via NRC Archery Club under Palmdale's stepped-up program, highlighted by recent opening of Clubhouse. Left to right—John Griffen; Roy Hammond; then Robin himself—Commissioner Roy Freed; Bob Dean; Jim Scalley; Margaret and Forrest Houdesheldt; then Bill Dane and Walter Graham. Activity is one of many in full swing . . .

AMATEUR RADIO, as seen, is another hobby having its followers at Palmdale. Kay Shryock, recent graduate of an Antelope Valley high school—and now a Norcrafter—gets word on "ham" Ken Nudson's car radio. Ken, in addition to this interest, is also president of a flying club. Other "hams" at Palmdale—Dick Warnick and Ed Fitzpatrick. Radio hobby involves considerable investment in spare time work.

Down --- ---Range

Another high honor has been awarded to Lieutenant Colonel John P. Stapp, USAF medical officer, with presentation to him of Air Force's 1954 Cheney Award . . . Presentation, made by General Nathan F. Twining, AF Chief of Staff, honored Stapp's experiments on Northrop-built rocket-propelled sled, by which he contributed data for bail-out procedure from high altitude, super-sonic aircraft . . . (See Northrop News, February 5, 1955).

Experimental Flight Test Norcrafter C. E. Taylor, instrumentation engineer, is member of newly-formed organization called Society of Photographic Instrumentation Engineers . . . Group studies photo-instrumentation techniques, late equipment developments, and exchanges information on various phases of data-recording equipment . . .

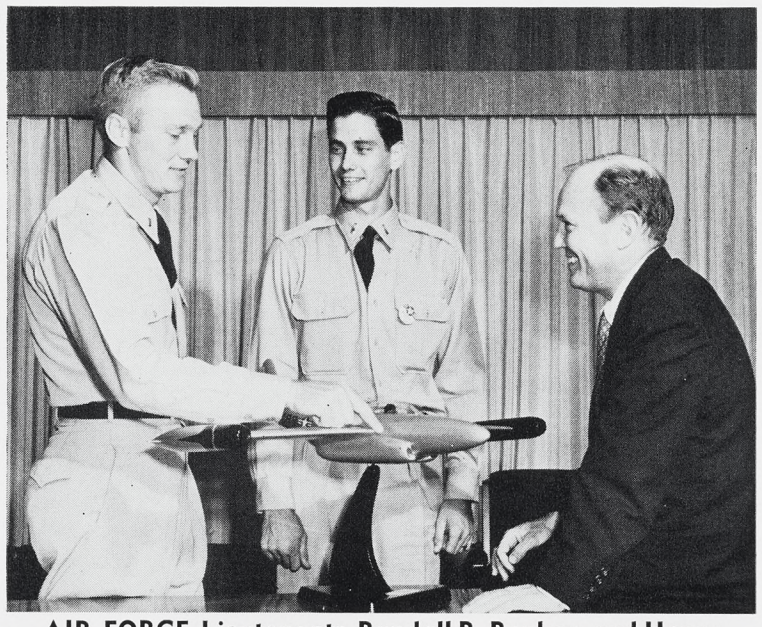
Cooling note to Norcrafters who retain memories of recent hot spell:—report from Belvin Brigham, Northrop tech rep with 18th FIS, Ladd AFB, Alaska, says: ". . . First snow fall for winter of '55-56 came on the 29th of August although it melted rapidly. This early warning of winter speeded up the winterization program for both aircraft and personnel . . . "

Airborne Chapter members of National Secretaries Association were hostesses for prospective members at tea in Garden Room of Miramar Hotel, Santa Monica, on September 25 . . . NSA members representing Northrop included Margaret Boles, Marian Wallace, Laura Coonradt, Dorothy Moore, Joan Olson, Barbara Proffitt, Betty Schumann, May Ward, and Isabelle Lowery . . . Secretary of the Year, Alice Huntley, spoke on qualifications necessary to attain Certified Professional Secretary rating . . .

William Oakes, Structures, will act as secretary on Materials and Structures session conducted by George Mangurian at SAE Production Forum meeting October 11-15 at the Statler . . . Oakes joins already long list of Norcrafters participating in SAE meeting (see Northrop News, September 14, 1955) . . .

TEEN-AGE CLUB has become one of the most popular Northrop Recreation Club innovations. Meeting each Friday night at the Clubhouse, some 100 teen-agers have already signed up. Horseshoe around the juke box, from left—Connie Moor, James Tommy, Harry Budd, Dianne and Mary Hartley, Ronnie Wheeler, Dave Connell, Bonnie Selvidge, Dorothy Cole, Eddie Blackburn, Bennie Westmoreland, Jean and Betty Sanders, Terry Cole, Judy Wilson, Ronnie Large, Bob Holstine, Pat Connell, Larraine Pagent, Bob Tommy and Mardell Smith. Ages—13 to 20, with welcome mat out for not only Norcrafter teenagers, but friends of Norcrafter "teens" as well.

Twin-Engine Reliability Pays Off for Scorpion



AIR FORCE Lieutenants Randall R. Renken and Henry G. Gerling III, 432nd FIS, recently brought damaged Scorpion to earth safely on one engine. They are relating incident to Vice-president John R. Alison.

Safety-consciousness of Norcrafters is reflected in the Scorpions they build—from Engineering drawing boards all the way to performance in tech reps' areas of operation.

Long proud of their product and its built-in safety, Norcrafters had their confidence in twin-engine reliability proved by the following incident:

First Lieutenant Randall R. Renken, pilot, and Second Lieutenant Henry G. Gerling III, RO, were flying an active air defense mission out of their 432nd Fighter Interceptor Squadron base at Minneapolis-St. Paul.

They were airborne 15 minutes, and at an altitude of 7000 feet with indicated 400 knots airspeed, when the right engine became inoperative due to internal malfunction.

Renken was flying with both hands on the throttles. The force of the incident, and the resultant move of the right hand throttle toward cut-off, also thrust the left-hand throttle to cut-off. Both engines then shut off.

Renken actuated the fire switch, calmly gained more altitude, and worked unhurriedly to start the left engine despite smoke and the tenseness of the situation.

On his second attempt he got an air start on the left engine, coolly flew 135 miles back to the base; made a normal, routine landing.

He made his report, and laconically took off for his regular bowling session. (No one apparently has thought to ask his score that night!)

But Renken's heads-up performance in the damaged aircraft caught the attention of Northrop management, and both he and Gerling were invited to visit the company.

The combination of airplane reliability and cool action by the pilot had transformed an emergency into a normal landing procedure.

Colonel Millikan Joins Northrop Capitol Staff

Colonel Willard W. Millikan (USAF-ANG) has been appointed assistant Washington representative for Northrop Aircraft, Inc., President Whitley C. Collins has announced. Colonel Millikan will work with S. W. Towle, jr., Northrop's Washington representative.

Prior to his Northrop appointment, except for an 18-month tour of active duty with the U. S. Air Force during 1951-52, Colonel Millikan had served continuously for 10 years as Washington representative for the Goodyear Tire and Rubber Company.

A native of Hamburg, Iowa, Colonel Milikan was born in 1918 and attended Peru State College in Peru, Nebraska. In 1941 he joined the U. S. Army Air Corps and later served in England with both British and American aerial units until 1945.

Among his wartime decorations were the Distinguished Service Cross, Silver Star, Distinguished Flying Cross with five Oak Leaf clusters, Air Medal with three Oak Leaf clusters, and the Purple Heart.

Colonel Millikan was assigned to inactive status in October, 1946, and joined the District of Columbia Air National Guard the same month. He has served as commanding officer of the 113th Fighter Interceptor Squadron, DC-ANG, since 1952.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 3

Published every other Wednesday by
INDUSTRIAL RELATIONS DIVISION, NORTHROP AIRCRAFT, INC.
JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

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News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — Wednesday noon before publication.

FOR SALE

ENCYCLOPEDIA BRITANNICA, 2 years old, new condition, $100, can finance; 5-gallon BUTANE TANK, $7.50. ALAN B. JONES. Write to Northrop News, Box 314. A

AUTOMATIC WASHER, 1954 Firestone, excellent condition, must sacrifice, $75. OR 1-5954. A

WIRE RECORDER, Webcor, never used, complete with extra spool of wire, cost $100, $65. JOE DAWSON, AD 3-2559, before 3:30 p.m. A

AIRPLANE, Mooney Mite, ½ interest offered to responsible pilot, plane equipped with 2-way radio, turn and bank indicator, navigation lights, generator, parachute. Licensed to May, '56. R. SCHNELKER DA 9-5308. A

AUTOMATIC IRONER, Simplex, excellent condition, sacrifice due to lack of space, $50. PL 6-5831. A

WASHER AND DRYER, automatic Hotpoint matching units, 1953 model, excellent condition, $175 for both. R. E. SWEARINGER. HO 2-6968. A

SPEED BOAT, 16′ mahogany. Fiberglas bottom. Ford V-8 engine, live bait tank, 3-wheel trailer. compass, $575. J. L. THOMAS. FR 4-6520. A

SLIDE PROJECTOR, 35mm La Belle 500 watt, like new, with case, $75. CURTIS D. CRAIG. Write to Northrop News, Box 315. A

HOUSE, 5 rm., ½ acre. A-1 zone, corrals, fenced, Lynwood, $10,500, terms. REFRIGERATOR. G.E., $25; red chrome TABLE and 2 CHAIRS, $25. EDNA DE VARKIN, NE 8-1413. A

BICYCLE, boy's English racer, 2 yrs. old, $20; Flexee COASTER, $4. J. G. CLARK, EX 3-5181. A

STROLLER, Folderola; folding CAR BED (baby), both in good condition, both items $10. L. H. ROGERS, FR 4-5286. A

BUICK CONVERTIBLE, 1952 Super, power seats and windows, new top, $200 for my equity, take over payments of $43 month. JACKIE THOMPSON. FA 8-7869. A

TABLE SAW, 10″ Walker Turner, ½-horse motor; 6″ Walker Turner JOINTER, ½-horse motor, both units ballbearing mounted, $135. OS 6-7104 after 5:00 p.m. A

DINETTE SET, chrome, Duncan Phyfe, apartment size, 4 chairs, yellow and blue, $25. LOIS JEANNE CUMMINS. Write to Northrop News, Box 317. A

WELDING TANK, Presto Lite, and attachments, $25; small, heavy-duty TRICYCLE, $7.50; ride TRACTOR, new 7½-h.p. motor, plow, harrow, disc and scraper, $275; gasoline Choremaster POST HOLE DIGGER, $100. HAROLD L. BENNETT. Write to Northrop News, Box 316. A

HOUSE, 2-bedroom ranch stucco, garage attached, 50x140 foot lot. Manhattan Beach, near school and shopping, $6000 full price. H. L. SETZKE, L.B. 39-7950. A

OLDSMOBILE, 1952 4-door, $1500 or take over payments. WALTER R. COX. OS 5-5187. A

LINCOLN, 1950 4-dr., $695. MARY CUCCIO OS 5-3777. A

CHIHUAHUA PUPPIES, A.K.C., small breed, $50. ROBERT McCANN, OS 6-7288. A

BUICK, 1939 club coupe, as is, $30. PETE DAL POS, PL 7-1195. A

IRONER, Universal, $25. R. CHRISTOPHERSON, L.B. 202-405. A

CHEVROLET, 1953 Bel-Air Deluxe, two-door sedan, $1175. FR 4-6419 after 4 p.m. A

MOTOR SCOOTER, Powell, 11¼ h.p., needs some work, $35. WILLARD CONROW, JR., SY 5-2056 between 6 and 9 p.m. A

CAMERA, Argus C-3, built-in flash, coupled range finder, color coated lens, leather case, $35. GORDON D. MADISON. Write to Northrop News, Box 320. A

MERCURY Monterey, 1952, $1350. G. F. WATKINS. NE 5-6588 or NE 8-2111. A

DINING ROOM TABLE, solid walnut, $15; AUTO RADIO, good condition, $15; BED DIVAN, $15; outside TV ANTENNA, $5; inside TV ANTENNA, $2; HEADBOARD for double bed, $5. W. J. ST. JAMES, JR. Write to Northrop News, Box 319. A

STUDIO COUCH, makes into double bed, excellent condition, $40. H. RAPSTAD, FR 8-3425. A

FORD, 1951 Fordor V-8, overdrive, $595. BILL DEDON, EX 4-1982. A

COUCH AND CHAIR SET, living room, good condition, clean, $20. R. C. NOWACK. DA 9-3503. A

KAISER, 1949 Traveler, station wagon, $125. FRANK WAKELAND. OS 6-2455. A

BASSINETTE, white, removable legs, wetproof pad, $7. LILY FARRIS, OS 5-6566. A

GRASS RUG, 200 square feet, natural color, good condition. $15. TIM B. SEMAN, GR 8-3990. A

FOR SALE

FORD CONVERTIBLE, 1941. $195. ANTHONY MORETTI, NE 8-2334. A

DODGE, 1953, V-8 4-dr. sedan, auto. trans., $1195. WILBERT T. FERRIS, PL 5-4114. A

HOUSE, 3-bedroom, enclosed back yard, close to grade school, low down payment and monthly payments, Gardena. DA 9-5548. A

WASHER, fully automatic, with suds saver, new hoses, just overhauled, $100 cash. LOIS LINTON, DA 9-3390. A

LAWNMOWER, Craftsman, assorted garden tools, tool rack, $15; Easy Whirldry apartment size WASHING MACHINE, ideal for baby clothes, $25; CERAMIC KILN, Cress Model 14 and ceramic molds, $100; Sprayberry home-study RADIO COURSE, $20; 50-lb. pull BOW with target, $10. FR 4-8317. A

PIANO ACCORDION, $800 value, 120 bass, 7 treble 2 bass switches, fully automatic, case, $275. E. KRUEGER, PL 8-7750. A

FREEZER, 14 cu. ft. Sub Zero, upright, like new, $225; 240-gallon automatic circulating WATER HEATER, $100; 34″ DOORS with windows, $4 ea. O. H. LARSEN, DA 9-3119. A

CEILING FIXTURE, electric, nautical style; brass TABLE LAMP, white shade. H. B. WATERMAN, WE 5-6824. A

UTILITY TRAILER, 2-wheel, steel frame and bed, new 600-16 tires, $55. OS 5-6268. A

CLOTHES, girl's nearly new dresses, blouses, sweaters, jacket, sizes 12 to 14, reasonable; WASHER, ABC wringer with pump, excellent condition, $35. E. F. MALCOLM, WI 7-4583. A

ALUMINUM SET, waterless, most of pans have never been used, reasonable. R. A. NELSON, DA 9-3702. A

BOY'S BICYCLE, 26″, just rebuilt, $17.50. W. E. TOWNSEND, OS 6-3448. A

MERCURY Montclair, 1955, returning to school in Sept., must sacrifice, Merc-O-Matic, power steering and brakes; make offer. KEN SEWELL, OR 7-2674. A

CAMERA, Ansco Super-Regent 35mm with case, like new, $65; Weston direct reading LIGHT METER, $10, with camera; combined value over $100. P. A. HASTINGS, OR 7-1400. A

WEDDING RING SET, diamond engagement and wedding ring, originally sold for $325. $125 cash. M. A. DUNCAN, FR 2-1271, after 5 p.m. A

GAS STOVE, Wedgewood 36″, thermostatically controlled oven, non-automatic timer, 2 years old, excellent condition, best offer over $60. J. C. HELLAND, FR 5-8186. A

OUTBOARD MOTOR, 30 hp., 1955 model, Scott-Atwater, used little, $385. FR 4-2190. A

CHASSIS, Crosley, complete engine in good running condition, all instruments, seats, etc., everything but body, $100. W. A. SYMINGTON. Lanc. 617-J. A

HOME, Westchester, large landscaped lot, near schools, churches, shops. 3 bedrooms, separate dining room, carpeted, newly painted, $14,750. DANIEL M. PECK. OR 7-0078. A

BOXER PUP, male, 6 mos. old, purebred, has ears cropped and all shots, plus large custom-made dog house, 2 mos. old both for $75. D. H. DAVIS, PL 6-0015. A

STUDEBAKER, 1951, Commander V-8, automatic transmission, $550; 2-wheel BOX TRAILER, 4′x7′ bed, licensed, $45; child's TOY CAR, $5; TOY TRACTOR AND TRAILER, $15; boy's 28″ BIKE, $15; 16″ 2-wheel BIKE, $10; TEETER BABE, $1; baby's SWING AND STAND, $2. PHIL SOKOLOWSKI. FR 9-8108. A

TABLE SAW, De Walt, $145. OTTO LEE, OR 6-3669. A

COFFEE TABLE, mahogany, leather top, and 2 matching LAMP TABLES, excellent condition, glass tops, $75 for 3 or sell separately; INNERSPRING MATTRESS, good condition, $19. MAX STERN, DA 4-6748. A

AIRPLANE, Ercoupe, all metal, primary blind group, just relicensed, new tires, clean. Sell whole or half interest; can be seen on field. R. HAYOS EA 2-1503.

KITCHEN STOVE, four-burner with oven, $10. H. R. STANLEY. OS 5-1450. A

M.G.-T.D., 1952, tonneau and wheel cover. JOHN STRATTON, OS 5-3662. A

JAGUAR, 1954 modified roadster, never raced, new tires, wire wheels, $2495. PAUL GONZALES. RE 5-7724 A

BICYCLE, girl's 24″ good condition, w/w tires, $25. JIM BARTLETT, DA 6-7668. A

PLAY PEN, Trim-a-Loon; 95-lb. WEIGHT LIFTING SET with dumbbells; used LAWNMOWER. OR 1-2478. A

BOXER, thoroughbred female, show dog, $250 or make offer. RUDOLF R. STEINBECK. Write to Northrop News, Box 301. A

TRAILER, two-tone blue, 21′, accommodates four, good condition, fully equipped, $375. MRS. SOKAN, FR 9-2596. A

FOR SALE

DEER RIFLE, 30.06, mounted with 2.5 power Weaver scope, sling and Bishop stock, custom made from Jap rifle, $70; Lionel ELECT. TRAIN, 1 year old, $14; 45-70 Marlin RIFLE, reblued, A-1 condition, with box of shells, $30. H. SACHS, PL 6-4952. A

SPEED EQUIPMENT, Offie manifold, 2 pot, w/94 Ford carbs., chrome air cleaners, $40, for '49-'53 Ford or Mercury; set of Fenton 8.5:1 alum. racing heads for '49-'53 Ford or Mercury, $40; 1949 Plymouth ENGINE AND TRANSMISSION (one unit), excellent condition, with generator, starter, spark plugs and carb., complete, $50. FRANK FERREN. Write to Northrop News, Box 306. A

GAS RANGE, O'Keefe & Merritt, 1½ years old, like new, automatic oven and timer, hi-level broiler, reasonable. E. B. HALLMARK. Write to Northrop News, Box 305. A

CHEVROLET, 1946 club coupe, $275. JOHN E. LASSWELL, DA 6-5106. A

PLYMOUTH, 1941 tudor, $40. W. WAMSLEY, OR 1-6434. A

FORD, 1950 V-8 2-door, overdrive, $575. GERALD F. EGAN. Write to Northrop News Box 312. A

VACUUM SWEEPER, 1954 Kirby, all attachments, including floor polisher, $100; 1955 completely automatic TOASTMASTER, $20. MARIANNE F. WILLIG, OR 8-4489. A

OLDSMOBILE 88 1950 sedanette, standard transmission, '55 4-throat carburetor, '55 rocker arms, $795. NORMAN HOLTKAMP, EX 8-7305, after 5:00. A

MOVIE CAMERA AND PROJECTOR, 8mm, some unused rolls film, B&W. R. E. COURTNEY. TE 8-8866. A

DRAPES, 2 pr. satin shantung; green floral pattern, 1 pr. 6 widths, 1 pr. 4 widths, cornice boxes to match; traverse rods included. No reasonable offer refused. RICHARD S. MAZY. Write to Northrop News, Box 311. A

GAS RANGE, Wedgewood (C.P.), excellent condition, automatic oven controls, clock, broiler, griddle, $125. R. L. MEYER, PL 6-7145. A

TV, 17″ G.E., mahogany cabinet, completely overhauled, new picture tube, etc., $75. PL 4-0021. A

MOBILE HOME, 1954 35′ Viking, 2-bedroom, must sacrifice, make offer, can finance through bank. TE 5-3393, 10 a.m. to 3 p.m. or after 6 p.m. A

CAMERA, G Leica F-2 Summar coated lens, like new condition, sun shade, filters, Guise synchronizer, $125, HAROLD PARRY. OR 1-9835. A

ELECTRIC RANGE, fully automatic Westinghouse deluxe; two 7:00 x 15.0 TIRES & TUBES; one 7:00 x 15.0 SAFETY TUBE; like new Proto open & box WRENCHES, ¼″-1⅞″-1½″-1⅝″; reasonable price. GEORGE DRIVER. Write Northrop News, Box 328. A

DIAMOND DINNER RING for little finger, unusual design of nine diamonds, platinum mounting, $225. LOIS KEEFER. Write to Northrop News, Box 324. A

EXTENSION TABLE, 40x45, yellow Formica and chrome, $12.50, cost $35; PRESSURE COOKER, 4½ qt., $8.50. KAROLL SHURTZ, OS 6-0393. A

OLDSMOBILE 1939, $150. R. B. ALGER, PL 2-4377. A

HOT WATER HEATER, 30 gal. Wilshire, still in crate, $55. OS 6-3319. A

MOTOR, 1946 Merc., Eskadarian cam, rods, bearings, aluminum racing pistons, bored and stroked, all parts new, not yet assembled, block free, $60 total. DON GOODWIN. TE 4-6131. A

FORD '40, full race '48 Mercury engine, PAT PIERCE, DA 9-3613. A

ELECTRIC RAZOR, custom Schick with leather carrying case, 1 year factory warranty, sells for $28.75, $18, like new. D. WEAVER, OS 5-2331. A

HOME, 3 bedrooms large lot, patio, G.I. 4% loan, $11,250, $2000 down. R. L. BALL, OS 5-1404. A

VENDING MACHINES, 8 Kleenex and inventory, reasonable. AX 1-5861 evenings. A

MOTO GUZZI, 1953 250-cc, like new. Reasonable. WE 4-9928. A

CAMERA, 2¼x3¼ Graphic, f4.5 Optar lens, Kalart range finder, Graflite flash, pack adapter, roll film pack, excellent condition, new $200, sell $129; GADGET BAG, $7.50; Golde Duo PROJECTOR for 2¼ or 35 mm slides, $28.50; or all for $150. V. N. EVANS, OS 5-4435. A

DOBERMAN PINSCHER 4 years old, excellent watch dog, good with children. Dog house available, make offer. RICHARD E. HOLDER, OS 6-1692. A

CONTOUR CHAIR, gray plastic leather, like new, original price $82.50, $40. G. H. STOCKWELL. OR 2-2555 after 5:15 p.m. or weekends. A

DUCK BOAT, 12′ plywood with air tanks $30. LB 800-82. A

SCINTILLATOR #111 precision gun type, new batteries. Excellent condition, original price $495, $325; JEEP, 1946 civilian, 4-wheel drive, extra set of free wheeling front hubs, extended body, enclosed. $595. NICK RANILL, Klmberly 3-9980. A

AUTOMOBILE, 1941 club 4-passenger coupe, new motor, $150; DEFROSTERS, 2 electric refrigerator defrosters in sealed factory cartons, bought for gifts at $14.95, $12.50 each. W. McEWEN, write to Northrop News, Box 332. A

PULL AND LIFT, Yale and Towne, ¾ ton. BILL RICHARDS, PA 8-1567. A

FOR SALE

PIANO, mahogany upright, good condition; 2ND TRUST DEED, 3 bedroom house, Torrance. B. McKIERNAN, DA 9-6765. A

HOUSE, 3 bedroom, attached garage, patio, fenced back yard, newly decorated, between Main and Avalon, Gardena. $1000 down, $8350 full price. CHARLES C. LYONS, write to Northrop News, Box 331. A

ELECTRIC RANGE, Westinghouse double oven $225; LAUNDROMAT, $150, both 3 yrs old; STUDIO COUCH, like new, makes single, double or twin beds, $110; RATTAN FURNITURE dining table and 6 chairs, 4 pc. sectional, 2 club chairs, 2 end tables, coffee table, corner tier table, 2 lamps, make offer. HOWARD GILL. OS 5-4191. A

HOUSE, 2 bedroom, Alonda Park, w/w carpet, covered flagstone patio, block fence, $975 down, monthly payments $79. MARTIN, DA 9-5484. A

CUB SCOUT equipment, shirt, tie, hat and book, for 10 year old, practically new, $3. OR 2-9206. A

DESOTO 1952, 4 new tires, $1000 cash. G. LOEBNER, TO 7-5093, evenings only.

GAS RANGE, 4-burner, 2 years old, $60; electric REFRIGERATOR, '49 Kelvinator, 9 cu. ft. $55. Both good condition. BETTE BENNETT, OS 5-4131, mornings. A

WHEEL CHAIR, collapsible; 1 pair CRUTCHES. $75. MILDRED B. DAVIS, FA 8-7533. A

PHOTO ENLARGER, complete with trays, safelite, easel etc., ideal for 35mm. E. B. GUNTHER, OR 7-1401. A

PLYMOUTH, 1952 4-door. $800, terms. CHESTER C. NICKLES, LU 7-8659, after 5 p.m. or weekends. A

SHOP TOOLS, 2 Federal dial indicators, 1 depth mike, 1 drill chuck, set drills—numbers, letters and size, ⅜ tool holder, also taps, dies, and reamers; CAR-TOP CARRIER, used one trip. PAUL L. WARREN, DA 6-2227. A

DESOTO, 1946 4-door custom, fluid drive, $150. L. C. EISELE, DA 9-5021. A

HOME, two story, 4 bedroom, 2 bath stucco, lot 62 x 105, 1 yr. old, fenced yard, $12,750, low down, Torrance. DA 9-6074, evenings and weekends. A

SEWING MACHINE, leather or canvas, foot treadle model, good condition, $25. W. O. WILSON, FR 4-9606. A

OLDSMOBILE, 1941 6 cyl., 2-dr. sedan, $75. ALLISON DICKASON, FR 5-3938, evenings. A

FREEZER, G.E., still in orig. crate, 7 cu. ft., holds 245 lbs. $150; Thayer BABY BUGGY, like new, will fold to go in baggage compartment, $15. PL 5-6360.

ELECTRIC TRAIN, Lionel, with extra equipment, $75; double GARAGE DOOR with hardware, reasonable; PRESSURE COOKER, 25 quart, $12. MARTHA B. FRENCH, OR 8-4276 or OR 4-1381. A

HOUSE, 3-bedroom stucco, near school and market, less than three years old, redwood fence, roofed patio 11x26′. Terms to suit buyer. $9500, $50 down and $25 week or $500 down and $75 per month. TE 4-7305 after 5:00 p.m. or weekends. A

BOAT, 16′. 81″ beam, fiber-glassed, cabin cruiser, Mark 25 engine, trailer, boat and engine have only 9 hrs use. $675. J. LA ROSA, PL 5-7207 or PL 4-7534. A

WIRE RECORDER, Silvertone, with extra spools, cheap. RE 4-5330. A

MERCURY, 1949, overdrive. $495. FA 8-3306. A

PIANO AND BENCH, professionally rebuilt up-right, new felts, keys refinished, mahogany finish, purchased less than year, $300. Write to Northrop News, Box 321. A

TV, 17″ Hoffman console, $75; Magnavox RADIO-PHONO, $60; chrome DINETTE SET, $25. J. G. REID, FR 4-6821. A

DOUBLE BED, springs, mattress, $12; BOX SPRING, inner spring MATTRESS, $15; PICK-UP BOX, approximate 4x7′, A-1 condition, $7. J. HARTINGER, PL 6-8893. A

SIX YEAR CRIB, waxed birch, double drop sides, excellent condition, $15; STROLL'O'CHAIR, high chair combo, consists of high chair, converts to table and chair or stroller with canopy, $25, very good condition; collapsible STROLLER, like new, cost $14, $5. F. THEODORE, DI 2-0165. A

CHEVROLET MOTOR, 1927 .040 over bore ideal for boat, also wheels, frame and steer gear, dismantled and clean, make offer. OR 7-1540.

AUTOTRONIC EYE, for GMC 6-volt system cars, any reasonable offer accepted. RUSSELL RUTTER OS 6-4795. A

REFRIGERATOR, Coldspot, 4 years old, automatic defroster, freezer across top, 9.3 cu. ft., $75. OS 6-6721. A

COFFEE TABLE, two END TABLES, blonde oak, very modern, practically new. RALPH CARRETTA, JR., FR 9-5259. A

MERCURY 1950 4-dr., $575; Gas REFRIGERATOR Servel Electrolux 6 cu. ft., clean, $55. R. G. ECKLES, OR 1-5046. A

FORD, 1950 Custom 4-door, overdrive, low priced. D. D. SIKORSKI, OS 6-3110.

SIAMESE KITTENS, Seal Point, from pedigree show stock, $10 and $15. ARNOLD STRAUB, OS 6-7723. A

BUICK, '55 Century Riviera, $2895. FR 5-7487. A

CHEVROLET, '47 convertible, engine rebuilt last January, $200; SLIDE RULE, 10-inch Dietzgen log log vector type, includes manual and leather case. $7.50. C. ALLEN YEAGLE. Write to Northrop News. Box 330. A

WANTED TO BUY

LIGHT GARDENING, rates open. TAMARA ANDREEVA, GL 4-2550, late p.m.

MARINE CONVERSION for 1949 Ford V-8; must be complete. RAY GRISH, FR 2-4673. B

CAR, cash for clean transportation car, Chevrolet, Ford or Studebaker preferred, $100 to $300. LESLIE MATTHIES. Write to Northrop News, Box 313. B

LAMP, drafting table, 24″ arm or more, Dazor or similar model. C. T. DORSETT, DO 7-5928. B

CHURCH FURNITURE, Communion set, seats, piano, building material, must be cheap. Will call for. CHARLES L. GRANT, L.A. area RE 2-0663, Palmdale area WI 7-1925. B

CAMERA, 4x5 Pacemaker Speed or Crown Graphic with CRF and flash, plus accessories. GORDON D. MADISON. Write to Northrop News, Box 309. B

CAR, am interested in taking over payments on late model car, 1951 to 1955, preferably Ford. Will consider other models. Price open. DIXIELEE M. WITHERS. Write to Northrop News, Box 307. B

FOOTBALL SHOES, pair, size 6 or 6½, rubber cleats, for varsity football. VIRGINIA PACE, FR 5-4232. B

TURRET LATHE, to buy or lease, small Levin (or equivalent in another make) with tooling and accessories. NE 8-6065.

DODGE AMBULANCE, 4-wheel drive or power wagon or similar vehicle suitable for heavy duty desert travel, good condition and reasonably priced. NICK RANILL, Klmberly 3-9980. B

OUTBOARD MOTOR, 2 or 3 horsepower, lightweight model in good condition. Any make. FRED A. CUNNINGHAM, Palmdale, WI 7-3329. B

SHOPSMITH Mark-5, or 8-inch tilting arbor SAW. R B. WALKER, LB 312-193.

INCOME PROPERTY or LOTS suitable for erection of income units, Los Angeles area. Write to Northrop News, Box 326.

FOR TRADE

TABLE SAW, 8″ Craftsman, tilting arbor, ¾ horse motor, cost $145; will trade for Geiger counter of equal value. JOE M. WILLIAMS. Write to Northrop News, Box 308. C

FRY RITE Presto (6 lb) used only 8 times, trade for twin waffle iron. R. A. PARTRIDGE, TO 7-5906 after 5:30 p.m.

BIKE, trade boy's 26″ bike (fair condition) for boy's 20″ bike. W. O. WILSON, FR 4-9606. C

FOR SALE OR TRADE

KAISER, 1948, 4-door, new battery, sell for $200 or trade for outboard boat and/or motor, $200. JOHN E. LASSWELL, DA 6-5106. M

CROSLEY 52′ Super Sport, cast iron 10-1 compression ratio engine modified and balanced, custom front end, etc. W. A. SYMINGTON, Lancaster 617-J. M

MOTORCYCLE, 1946 68-stroke Harley Davidson, ¼ mile drag, foot shift, solid tanks, 18″ front wheel. Sell for $295 or trade for car, machinery or ? DON SHNYDER, OS 5-4888. M

HOUSE, 3 years old, recently redecorated, large 3-bedroom, corner lot, 50′x 150′, fenced back yard, 9 miles from Northrop, bus service to Gardena, elementary school nearby, $800 down, bal. $8550 or will trade for 2-bedroom house near Hawthorne. Write to Northrop News, Box 304. M

DINETTE SET, table and 4 chairs, $30; 1931 CHEVROLET coupe, make offer or trade equal value; DRILL PRESS and MOTOR, $30. EVERETT MORGAN. Write to Northrop News, Box 310. M

ELECTRIC RANGE, Kenmore, top condition, Robotimer, deep well, broiler, etc., $50 or trade for what have you ? ? OS 5-5064. M

LAND, 1 1/10 acres, close to Riverside, reasonable, low down and monthly payments or will trade for land in Fullerton or Santa Ana. LEO W. DAY. Write to Northrop News, Box 318. M

FORD, 1949 sedan, overdrive, special high torque 6-cyl. engine. Sell or take light motorcycle in trade. DON AXT, OR 2-2551. M

SCINTILLATOR, gun type, leather case, built-in battery checker, 4 time constants used 18 hrs., assay scale on large meter, recorder, cost $510. $400 or will trade for jeep. R. C. GOTHARD, LU 8-1820. M

YOUTH BED, birch, natural finish, cost $90, excellent condition, with mattress, $30 or trade for comparable baby crib, natural finish. PHIL BADGER, OR 1-8548.

LINCOLN '47, 1948 Mercury engine; Portable professional DISC RECORDER; Hi-Fidelity 2-way SPEAKER SYSTEM in cabinet; 1.5 HP 110/220 volt MOTOR; 40-watt PA AMPLIFIER; or will trade for small motorboat, vac. tube voltmeter, 15″ coaxial speaker, or c.r. oscilloscope. W. S. COOK. DA 6-2467 evenings or week-ends. M

FORD '48 6, ½ ton panel, $160 for equity and take over 7 payments of $34, trade equity for what have you, or $395 cash. J. M. CURODEAU, write to Northrop News, Box 325. M

BOAT, 21′ Fiberglas bottom, 6 cylinder Gray Marine engine, good cond. $700 or trade for '50 or '51 model pickup. D. M. MOLLE, ME 3-5995. M

(Continued on Page 4)

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 3)
WESTERN AVE. & 104th., L.A. 47 (Car pool considered). J. R. LINDLEY (5411-17058, Ext. 1371), Ext. PL 6-7904. 12-3

(Zone 5)
CARSON & STUDEBAKER RD., Long Beach. (Lakewood Dist., anywhere in Bellflower south of Olive to Spring St., east to Studebaker Rd. Can take 3). ED D. DENNIS (5534-21449, Ext. 2244). 12-5

(Zone 10)
REDONDO BEACH BLVD. & MACKAY LANE, Redondo Beach. (Have room for three more riders. Leave home at 6:25 a.m.). NELLIE L. COOLEY (5504-19051, Ext. 1424), FR 9-1379. 12-10

7:30 a.m. — 4:15 p.m.

(Zone 9)
PALOS VERDES DRIVE & HWY. 101, Redondo Beach. (Car pool riders wanted). EVELYN GILBERT (3144-12547. Ext. 1846), FR 5-6267. 13-9

(Zone 10)
NORTH REDONDO BEACH area. (Will pick up in North Redondo area, Redondo Beach Blvd., also Prairie Blvd., north of Redondo Beach Blvd. to NAI). DAN CARY (5940-33277, Ext. 2661), FR 9-9573. 13-10

INGLEWOOD & 154TH, Lawndale. (Car pool considered.) GEORGE DRIVER (9320-39150, Ext. 2151). 13-10

(Zone 14)
PICO between La Brea & Fairfax, Los Angeles (19). (Car pool desired). MILTON GRUMMER (3310-30357, Ext. 477), WE 1-4320. 13-14

MAGNOLIA & LAUREL CANYON BLVD., North Hollywood. (Interested in car pool and rides offered). GEORGE IZMIRIAN (5940-39196, Ext. 2661), SU 1-0955. 13-14

3:45 p.m. — 12:15 a.m.

(Zone 5)
ROSECRANS & PIONEER, Norwalk. OTTO EBNER (5445-17439, Ext. 1926, TO 3-9542. 16-5

4:45 p.m. — 1:15 a.m.

(Zone 1)
WASHINGTON & VERMONT, Los Angeles (7). (I have room for three people). JOHN C. PEARSON. (5583-39311, Ext. 2244). 18-1

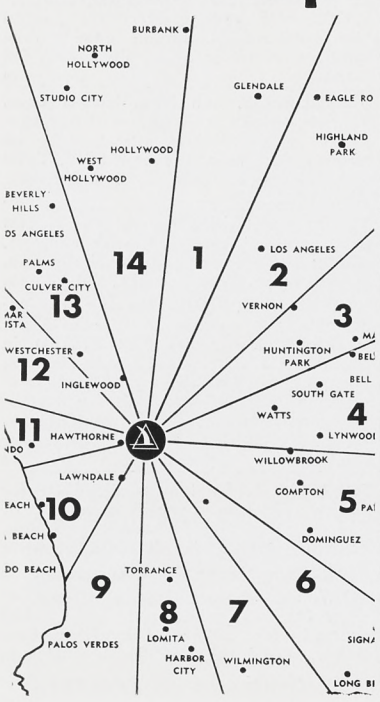
(Zone 5)
ORANGETHORPE & WOODS, Fullerton. (Car pool considered). EUGENE J. SNELLER (5587-23124. Ext. 2750). LAmbert 5-8729.

(Zone 10)
INGLEWOOD & ROBINSON, N. Redondo. (I will pick up riders at their home). ERVEN HEWITT (5352-39221, Ext. 1642).

(Zone 13)
LENNOX & PRAIRIE AVE., Inglewood. (Will pick up anywhere at the corners of Inglewood & Lennox, Hawthorne & Lennox, Prairie & Lennox). FRANK A. MANSANARES (5584-22114, Ext. 1381).

MANCHESTER BLVD. & INGLEWOOD AVE., Inglewood. LAWRENCE HALLIBURTON (5508-38455, Ext. 2755).

Zone Map



RIDES OFFERED

(Miscellaneous—Split Shift)

(Zone 1)
FLORENCE AVE. & CRENSHAW BLVD., Los Angeles. (Travel Manchester-Arbor Vitae, cross Freeman to Sepulveda). Mariposa—Hours: 7:15 a.m. to 4:15 p.m.). CHARLOTTE WOOLUMS (9320-27690, Ext. 487, 488). PL 3-7484. 20-1

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 2)
VERMONT AVE. & 62ND PLACE, Los Angeles. (This is close to Gage Ave. & Vermont). JEAN BALL (5507-37965, Ext. 725), PL 2-3358 (sister's). 2-2

CENTURY & WESTERN, Los Angeles. (ride to work only). ELLEN PARKER (5352-16106. Ext. 1731). PL 4-6212. 2-2

(Zone 4)
STATE ST. & IMPERIAL HWY., Lynwood. JUANITA COFER (5235-26561, Ext. 1847), NE 6-6646. 2-4

(Zone 5)
STUDEBAKER & SPRING, Long Beach (8). (Car pool considered). PATRICIA McMANUS (5507-34811, Ext. 564 and 526), L.B. 397-888. 2-5

BELLFLOWER BLVD. & FLOWER ST., Bellflower. JONES E. ANTHONY (5165-15041. Ext. 548). 2-5

(Zone 6)
WESTMINSTER. (Am thinking of buying a home in Westminster, Calif.; would like to know if anyone lives there, or near there). Y. C. KRAVANIS (5507-36336. Ext. 526 or 564). 2-6

(Zone 7)
AVALON & SEPULVEDA, Wilmington. ANGIE MAGILL (5353-37491, Ext. 1628).

(Zone 8)
YUKON & 171ST STREET, Torrance. JOSEPH J. SCHMIDT (5445-17470, Ext. 1370), DA 4-5091. 2-8

GAFFEY & 38TH or Pacific & 38th, San Pedro. FLOSSIE POTTORFF (5509-19971, Ext. 2075). TE 2-5452. 2-8

(Zone 9)
PRAIRIE AVE. & 190TH ST., Torrance. BILL GRAHAM (5338-15921, Ext. 2409). DA 4-9087. 2-9

(Zone 13)
GREVILLEA & HILLCREST, Inglewood. (Ride wanted or car pool.) A. D. BOGDEN (5503-38494, Ext. 2681). 2-13

7:30 a.m. — 4:15 p.m.

(Zone 1)
CRENSHAW BLVD. & W. 95th STREET, Inglewood. JUDITH A. PUESTOW (3311-39471, Ext. 619 or 1680). PI. 4-8289. 3-1

(Zone 2)
VERMONT & W. 80TH ST., Los Angeles (44). VIOLET GALIOTO (5240-36585, Ext. 2667-2668-2669), PL 2-5732. 3-2

(Zone 5)
ATLANTIC & COMPTON BLVD., Compton. JUNE BALDWIN (5930-39446, Ext. 753). NE 8-6838. 3-5

(Zone 6)
VERMONT & 161ST or Figueroa & 161st, Gardena. MARION HASKILL (8400-15147. Ext. 1530), DA 4-3655. 3-6

REDONDO BEACH BLVD. & VERMONT, Gardena. SHIRLEY MOBLEY (1421-12179, Ext. 691). 3-6

(Zone 7)
VERMONT & OCEAN ST. or Normandie & Ocean St., Torrance. (Would like ride home only. Ocean St. is also called 229th). JEAN GARZA (1421-12224, Ext. 1811 or 2393) DA 6-2567. 3-7

VERMONT & OCEAN ST., Torrance. LAURA A. WILLIAMS (3144-12572, Ext. 466). FA 8-4938. 3-7

DENKER AVE. & 182ND ST., Gardena. EILEEN ROACH (5917-34203, Ext. 1877). 3-7

(Zone 8)
CRENSHAW & 178th STREET, Torrance. (Willing to wait until 4:30 for ride). LOIS CUMMINS (8400-13313, Ext. 1405).

CARSON & ANZA, Torrance (in new Southwood Tract Homes, ANN OLIVIERI (8400-11999, Ext. 1442), FR 4-6013. 3-8

WESTERN & 227TH ST., Torrance. (Am handicapped). MILDRED B. DAVIS (5930-21981, Ext. 754). FA 8-7533. 3-8

(Zone 9)
OSAGE AVENUE & 149th. Lawndale. (Could meet rider on Compton Blvd. or Prairie Avenue, if necessary) JOAN M. TUSTISON (1810-24210, Ext. 2651). OS. 6-2019. 3-9

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 10)
FIRMONA AVE. & 147TH, Lawndale. (Want ride as soon as possible. Is four blocks off Hawthorne going west on 147th). NANCY SETSER (1421-38426, Ext. 693). 3-10

INGLEWOOD & 154TH, Lawndale. (Car pool considered.) GEORGE DRIVER (9320-39150, Ext. 2151). 3-10

MONTEREY BLVD. & 8TH ST., Hermosa Beach. DOROTHY MERRILL (9320-27724, Ext. 2151). FR 9-7724. 3-10

GARNET & 101 HIGHWAY, Redondo Beach. PAT CUDE (5300-12119, Ext. 1447). FR 9-9542.

(Zone 11)
HAWTHORNE BLVD. & 120TH or Grevillea & 120th, Hawthorne. (Ride home only). LITA GRAHAM (3144-12548, Ext. 1848). OS 6-3294. 3-11

(Zone 12)
LINCOLN BLVD. & MANCHESTER. H. R. STANLEY (5152-31645, Ext. 1753). OR 2-8756. 3-12

(Zone 13)
GREVILLEA & BUCKTHORNE, Inglewood. MINNIE M. LAUER (9380-28072, Ext. 2254). OR 4-1847. 3-13

HARDY & PRAIRIE AVENUES, Inglewood. FRANCES J. BLAINE (4530-38978, Ext. 617). OR 4-0571. 3-13

(Zone 14)
PICO between La Brea and Fairfax, Los Angeles (19). (Car pool desired). MILTON GRUMMER (3310-30357, Ext. 477), WE 1-4320. 3-14

MANCHESTER & PRAIRIE, Inglewood. (Need ride with someone turning West on Manchester.) DOROTHY ANDERSON (1210-29421, Ext. 447). OR 2-7226. 3-14

SANTA MONICA BLVD. & GOWER, Hollywood 38. (On direct route between Hollywood & Plt. 3 via Crenshaw Blvd.). I. J. PETERS (3547-30749, Ext. 1872), HO 4-0401. 3-14

8:00 a.m. — 4:45 p.m.

(Zone 5)
BUDLONG & EL SEGUNDO, Gardena. JULIET CARUSO (8310-27408, Ext. 2402). PL 4-6044. 5-5

4:45 p.m. — 1:15 a.m.

(Zone 1)
ARLINGTON & SANTA BARBARA, Los Angeles. ORVILLE R. McMULLEN (5503-39022, Ext. 1277). AX 1-0768. 8-1

BETWEEN WEST PICO & WASHINGTON and Alvarado & Union, Los Angeles (7). (One to four people need transportation.) ROBERT M. CLARK (7330-27046, Ext. 2295). 8-1

HOLLYWOOD BLVD. & WILTON PLACE, Hollywood. EDDIE C. CASSIDY (5583-39944, Ext. 1292). 8-1

(Zone 2)
VERMONT & MANCHESTER or Vermont & Florence, Los Angeles. HERBERT E. MARTIN (5583-39901, Ext. 1291). 8-2

(Zone 4)
AVALON & 99th, Los Angeles. (Will pay for ride). JESSE J. WELLS (5584-39693, Ext. 1381). PL 6-3437. 8-4

IMPERIAL & BROADWAY, Los Angeles. HELEN T. SHARP (4220-39534, Ext. 2421), PL. 6-7205 8-4

(Zone 6)
AVALON & 182ND ST., Gardena. THERESA L. TREPANIER (5507-39182, Ext. 526 or 564), DA 4-3590. 8-6

(Zone 7)
FIGUEROA & 101 COAST HIGHWAY, Wilmington. HAZEL EMORY (5621-36565, Ext. 2649). TE 5-4820. 8-7

(Zone 8)
CRENSHAW & TORRANCE BLVD., Torrance. LUCY E. LE BLANC (5235-39825, Ext. 2002). FA 8-0038.

CRENSHAW & 238th St., Torrance. BEVERLY C. JAMES (5507-39826. Ext. 526). 8-8

(Zone 9)
PRAIRIE & 161ST ST., Lawndale. (Would like a ride starting as soon as possible). NORBERT CISNEROS (5503-37, Ext. 2681). 8-9

PALOS VERDES BLVD., Hollywood Riviera. MARGARET LENNON (5232-15643, Ext. 2481). 8-9

REDONDO BLVD. & INGLEWOOD AVE., Redondo. RICHARD BATES (5583-39886, Ext. 1292). FR 2-2465. 8-9

(Zone 13)
KELSO & MANCHESTER, Inglewood. LAWRENCE HALLIBURTON (5508-38455, Ext. 2755). 8-13

(Zone 14
LA BREA & BEVERLY BLVD., Los Angeles (36). (Can drive to meet a driver at any convenient location if necessary.) CHRIS BOYKIN (5373-16730, Ext. 1488). WE 8-9293. 8-14

(Miscellaneous—Split Shift)

(Zone 2)
ADAMS BLVD. & HILL ST., Los Angeles. (Hours: 4:15 p.m. to 12:45 a.m.). PEARL ANGELOS (4100-33257. Ext. 2331). 10-2

(Zone 10)
ROSECRANS & HIGHLAND, Manhattan Beach. (Hours: 5:15 p.m. to 1:45 a.m.). JAMES B. BERRY (9350-39775, Ext. 1674 & 474). FR 9-5710. 10-10

MANHATTAN BEACH & SEPULVEDA, Manhattan. SANDY BAUBY (9330, Ext. 1471,2111). FR 9-5182. 10-10

BBSF CLASSIFIEDS

(Continued from Page 3)

FREE (To be given away)

PIGEONS, male and female, with small cage. E. C. FOX, FR 9-1397. D

KITTENS, 2 black half-Siamese toms, weaned and ready to go. C. D. BUNDY, FR 7-2552. D

COCKER SPANIEL, 6 years old, female, free. NEIL SIMMONS, ME 3-9193. D

ST. BERNARD, female, pedigreed, 3 years old, to good home. T. ANDREEVA, GL 4-2550 after 8 p.m. D

KITTENS, five 5 wks. old. BARBARA S. DAVIS, write to Northrop News, Box 323. D

SHEPHERD DOG, 7 mo. old, full blood, male. C. R. (TEX) RHODES. Write to Northrop News, Box 333. D

RENTALS OFFERED

ROOM, furnished. 10 min. walk to Plant I. gentleman preferred. OS 6-7104 after 5:00 p.m. E

HOUSE, 2-bedroom ranch style stucco, garage, Manhattan Beach, near school and shopping available 1 Oct., $75 per month. H. L. SETZKE, L.B. 39-7950. E

TRAILER SPACE, $16 per month dependent trailers, adults, no pets; FURNISHED APARTMENT, gas paid, adults, $10 per week. CLAUD O'BANNON, PL 5-9875. E

HOUSE, 4-bedroom, Lake Arrowhead, by week or day, reasonable. DOROTHY MOORE, DA 4-5774 evenings after 6. E

ROOMS, men or women, private home, Venice-Mar Vista area, one mile to beaches. $10 wk. W. B. COULTER, EX 1-2101. E

APARTMENT, unfurnished, 1-bedroom, baby OK, 5-minute walk from Northrop. OS 6-9823. E

DUPLEX, unfurnished, upper, garage, Hermosa Beach, near ocean, business, transportation, $75, water and gas paid. FR 4-7432. E

APARTMENT, unfurnished rear, Hawthorne, like new, adults only. $55 per month. C. F. LINQUIST, OS 6-1338. E

HOUSE, 2½ bedroom, garage, large front yard, water paid, $60 mo. DORIS M GRISSUM PL 4-3649. E

ROOM, for one or two, kitchen privileges. Hawthorne. OS 6-8945. E

APARTMENT, 3 room furnished, private entrance and bath, bills paid, children ok, $65. per month. J. L. BROWN, DA 4-6143. E

SHARE HOME, lady to share furnished home, Morningside Park. PL 4-8289, after 2 p.m. E

HOUSE, 1600 square feet, Early American, 2 bedrms., den, 1¾ baths, never occupied, Fullerton, built-in Roper range and oven, close to schools, 2½ miles Northrop-Anaheim, available October 1, $135-$150 monthly (dependent on number of children). W. R. SIMPSON, PL 3-8392. E

SHARE HOUSE, young man, Westchester, furnished, $40 month including telephone, TV, automatic washer, utilities. ART MARICK, OR 7-8466. E

HOUSE, furnished 5-room, adults only. H. J. BERGSTROM, write to Northrop News, Box 322. E

BEDROOM, furnished, private bath & entrance, quiet, near Olympic & Western. DON SCHUSTER. RE 4-5330. E

APARTMENT, 1 bedroom furnished, tile kitchen sink and bath, no children. $75. R. G. ECKLES, OR 1-5046. E

RENTALS OFFERED

APARTMENTS, new 2-bedroom, unfurnished, automatic washer & drier, garbage disposal, thermo heat, garage, close to Northrop, children O.K. L. M. KNIGHT, EX 6-6823. E

SHARE HOME, woman and small boy will share house with working woman or girl, private bedroom, kitchen & laundry privileges, $12 week. FR 9-8062, 6 to 10 p.m. E

HOUSE, 2 bedroom, garage, Compton, fenced back yard, venetian blinds, garbage disp., panel ray heat. Available Oct 1, $80 per month. R. H. BENTON, TO 7-7593. E

HOME, 3 bedroom, fenced yard, 7 miles from Northrop, children OK, furnished or unfurnished. NE 8-5038, 8 a.m. to 2 p.m. or 5 p.m. to 10 p.m. E

AIRPLANE for private flight instruction. WM. E. MEYER, DA 4-3720. F

RENTALS WANTED

SMALL HOUSE OR APARTMENT, furnished or semi-furnished, in or near Hawthorne, can pay $50 to $55 mo., son and self. JEAN P. NORRIS, FR 4-1293, neighbor. F

HOUSE, partly furnished, enclosed yard, two or three bedrooms, I have pets but no children. Desire home near Northrop plant, Hawthorne, if possible. $60 to $65 per month. JOHN PEARSON. Write to Northrop News, Box 302. F

HOUSE, 2-bedroom, garage, in Gardena or Torrance, by Oct. 1, 2 small children. REX BURNHAM, NE 5-4515. F

CHILD CARE OFFERED

CHILD CARE, ex-nurse and mother of nine grown children will give loving day care to child of working mother, prefer ages 2-5, walk to Northrop. Write to Northrop News, Box 303. G

DAY NURSERY, ages 3 yrs. and up. Close to school, fenced yard, balanced diet, naps if desired. Licensed. OS 6-6566. G

CHILD CARE, ages 3 to 10 yrs. near schools, fenced yard, play equipment, hot lunches, snacks, naps if desired. One mile from Northrop. Day or night shift. OS 5-7993. G

CHILD CARE, will care for one or two pre-school children in my home (day or nite shift), hot meals, fenced yard, plenty toys, play equipment. DA 4-4410. G

DAY NURSERY, licensed, ages 2 years to 5 years. G. L. TIPTON, OR 8-9824. G

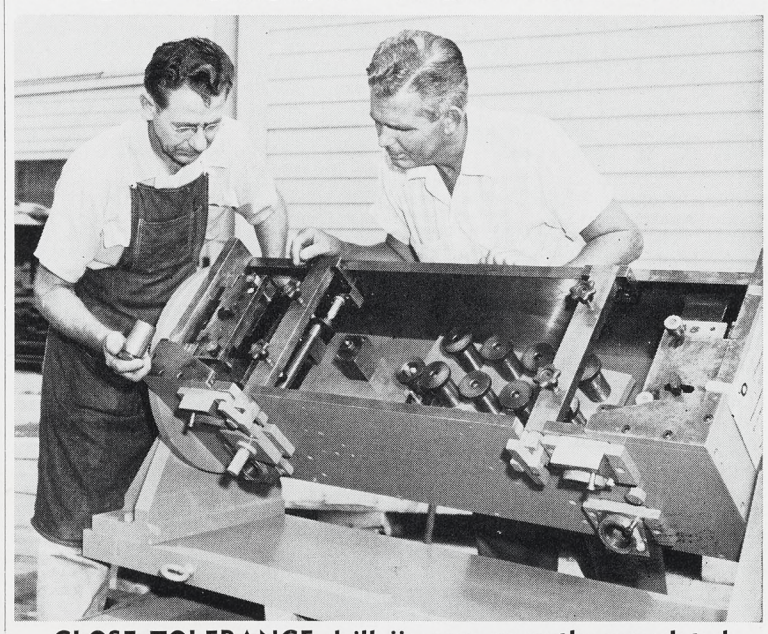
PERSONALS

RIDE, leaving for Wichita, Kans. about Oct. 1, can take 1 or 2 riders, help drive and share expenses, return Oct. 11. J. L. BROWN, DA 4-6143. L

RIDE, wish to contact party to accompany me to Albuquerque, New Mexico, share expenses and driving either my car or yours. Leave Oct. 21, return Nov. 4. DORIS KAISER, OR 1-9375 after 4 p.m. L

SINCERE THANKS to all Norcrafters and groups who sent gifts to Heart Association in memory of my husband. MRS. ROBERT KIRBY.

For Close Tolerances



CLOSE TOLERANCE drill jig was recently completed by Jig Construction (5411) Norcrafters for use on body castings on North American sub-contract. Ed Olexiewicz and Leadman Harry Tennyson are shown with jig, which was built to masters also constructed here. Tool rotates for better accessibility in drilling and boring. Bushings aid drilling, boring accuracy.

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

ART CLUB (nights)
Meet in Annex every Thursday from 1:00 to 3:00 p.m.

BASKETBALL (days), Bob Hughes
Practice sessions, Gardena High School, beginning October 5; every Wednesday evening at 6:45 p.m.

BIBLE STUDY, Roy Stahl
Meet daily, Plant I, east mezzanine conference room, 11:30 a.m.; Plant II, second floor, center conference room, 12:00 p.m.; Plant III, conference room, 11:00; Nash Building, 12:15.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Ralph Vincent

BOWLING (nights), Garland Steiner
Winter leagues now in progress.

BRIDGE CLUB, Walt Darby
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Robert Carberry
Meet every other Friday evening, 7:30 p.m. Next—Sept. 30.

CAMERA CLUB (nights), Gene Beck
Meet every other Saturday, 7:30 p.m. Next—Oct. 1.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF, Andy Titus
NRC Open Tournament, Baldwin Hills Country Club, October 9 and 16. Entry blanks at Personnel Activities.

GUN CLUB (days), Dick Booth
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—Oct. 10.

MIXED CHORUS, Florence Graveline
Meet every Wednesday, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Bill Kappele
Meet 1st and 3rd Tuesday of each month at Annex, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Friday after work (1:30 a.m.)—Redondo Skateland.

SKEET CLUB, Chuck Allen
Annual Skeet Shoot Saturday, October 1, Dominguez Gun Club, 10:00 a.m.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING CLUB (nights), Tex Hylton
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays. Beginning class Sunday afternoons from 3:00 to 5:00 p.m.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Bill Steffen
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ward Newton
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins
Winter leagues now in progress.

DINNER CLUB, Hazel Stewart
Next meeting Tuesday, October 11. Details to be announced.

INTERIOR DECORATION
Weekly meetings in lampshade making begin Thursday, October 6, 7:30 p.m.

SENIOR GIRL SCOUT TROOP (Mariners), May Hawkins
Meet Tuesdays, 7 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Vi Murphy
Meet first, third Thursdays, 7:30 p.m.

SPORTS *The Northrop News*

NRC SPORTS ROUND-UP

International President To Install TM Officers

High honor will be paid members of Northrop Toastmasters groups — Northrop 212, days and NorAir 1398, nights — at their forthcoming installation dinner.

VIP's from Toastmasters International, including President Jack Haynes, District No. 1 Governor Paul Hornaday, Executive Lieutenant Governor Al Halquist, and Western Section Lieutenant Governor James Van Dorn—Materiel division superintendent of Warehousing—will be on hand to install the newly-elected officers.

The dinner will be held on Saturday, October 1, at Scully's Restaurant, 4801 Crenshaw Blvd. Cocktail hour is scheduled from 6:30 until 7:30 p.m. and the dinner meeting will start at 7:30 to continue until 10:30 p.m. Wives and friends are invited.

Newly-elected officers of the Northrop No. 212 club are: Dave Leedy, president; Howard Cornelius, educational vice-president; Fred Barger, administrative vice-president; Joe Wenkunas, secretary; Howard Means, treasurer; Jim Lynch, sergeant-at-arms; Milo Griffin, publicity director.

The NorAir No. 1398 club's new officers include Ken Davidson, president; Sam Grutsis, educational vice-president; Barney Rentz, administrative vice-president; Bill Cox, secretary; Les Rowe, treasurer; Denny Swain, sergeant-at-arms; and Walt Brown, publicity director.

Leedy succeeds Bill Steffen, Engineering, last year's Northrop No. 212 president. Davidson steps into the NorAir No. 1398 spot held last year by Ward Newton of Standard Tool Liaison.

Installation of the clubs' officers by the International president is unprecedented in TM programs. It indicates recognition of the Northrop clubs' notable achievements in Toastmastering during the past year.

HOOP PRACTICE DATES SET

A brief summary of sporting events on the NRC calendar for the next few weeks shows an upward trend in many activities.

Basketball practice is starting a little ahead of schedule—October 5 — at the Gardena High School gymnasium, according to a report from newly-elected Commissioner Bob Hughes. Anyone interested in the hoopster sport should contact the Personnel Activities office for information and registration.

Bowling leagues for the winter season are now in progress and many leagues still have openings for interested bowlers on both day and night shifts.

The NRC Skeet Club will hold its annual shoot on Saturday, October 1, at 10:00 a.m. Scene will be the Dominguez Gun Club on Artesia Blvd., approximately one-fourth mile east of Central Avenue. The Lewis system of classification will be used—thereby affording the novice as well as the experienced shooter an opportunity to take home one of the NRC trophies to be awarded in each class.

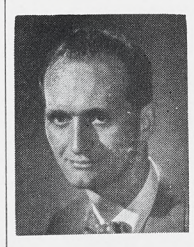
NRC greensmen will compete in the annual Open Golf Tournament for the Hawthorne facility championship at the Baldwin Hills course on October 9 and 16.

Entry deadline is September 30. All Hawthorne facility Norcrafters who have accredited handicaps are eligible to enter. Greens fees are $3.00 per 18 holes, $6.00 for tournament, payable with entries.

Model Plane Meet Slated For Ontario

By HAL HUNSBERGER
President
Northrop Recreation Club

An invitation has been extended by the Ontario NRC Model Airplane club to all Norcrafter model builders to meet on Sunday, October 2, at the Ontario facility parking lot.



The meet will feature special demonstrations and exhibits by national winners, as well as contests in combat flying, stunt flying, and workmanship. Trophies will be awarded to winners in each class.

All types and models will be on display, including model race cars, radio-controlled aircraft and radio-controlled boats.

The meet will be held from 8:00 a.m. until 5:00 p.m. Entries close at 12:00 noon.

★ ★ ★

Plaster Shop and Foundry (5437) Norcrafters, who recently bogged down in final weeks' play in the night shift NRC Softball league—losing the title to the eventual all-plant champs, Department 5620—took out their wrath on the opposition in the Southwest Industrial Recreation Association tournament.

Playing as the "Outcasts", and led by Manager Dick Adair, the Norcrafters swept through both rounds of the tourney, winning ten tilts and dropping none, to cop the competition handily.

Sponsored by the County Department of Parks and Recreation, the tournament included teams from Douglas and AiResearch, among others.

Kegling Royalty

THREE HITS AND A MISS — Women's Handicap Summer bowling league winning team, the Three Hits and a Miss, are pictured, left: Marie Genco, captain; Dorothy Adkison, and Dorothy Wirthman. Missing member—Virginia Adkison. Leagues bowl weekly.

MIXED SCRATCH FOURSOME — First place trophy takers in the summer bowling mixed scratch contest were the King Pins, pictured, left: John Bundy, Vi Leudke, Daisy King, and Art Leudke. Winners received alley trophies from Windsor Bowl. Some league entries are still available for Winter season.

NRC BALLROOM DANCING RESUMES; FIRST SESSION SLATED OCTOBER 8

The popular NRC Ballroom Dance classes are scheduled to resume on Saturday, October 8, at the NRC Clubhouse, according to word received from the Personnel Activities office.

Again this year, Bill Williams of the Bill Williams Dance Studio will provide instructions in American and Latin dances. Classes will be held every other Saturday night.

Lessons start at 8:00 p.m. and social dancing will be from 9:00 to 10:00 p.m. A fee of $2.50 per person will be charged for the series of five lessons.

Registrations are now being taken at Personnel Activities offices, Plants I and III, or dancers may register for the course at the door on opening night.

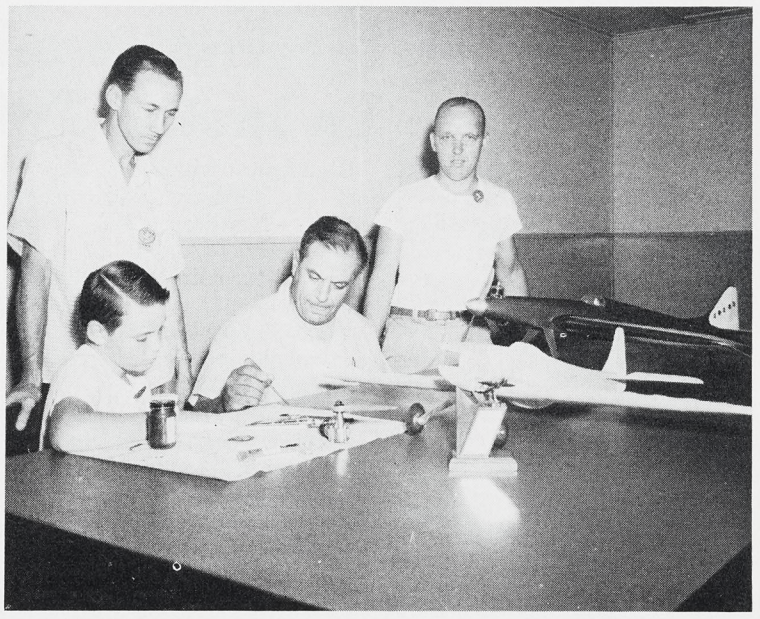
INDIVIDUAL TOP SCORERS — High point winners in the women's handicap bowling league—summer session—are pictured, from left: Betty Allor, high series scratch; Wanda Guinn, high game handicap; Betty Arf, high game scratch; and Betty Fullerton, high series handicap. Winter loops now in progress.

THE Northrop Scene BY DAY AND NIGHT

Mat Con Safety Leaders

FLORIDA NORCRAFTERS currently are on top rung of national safety standings. Leading way is Safety-Conservation committee whose new and former members gathered for photo above. Front: J. W. Mercer, Chairman J. W. Oed, Recording Secretary Dorothy Shingledecker, W. V. Long (AFMTC Ground Safety Officer), J. A. Christian. Second row: J. A. Kitson, L. C. Morris, John Bojtos, W. J. Malloy, E. D. Charpie, and J. T. Holmes, jr. Third row: C. L. Powers, R. M. Phillips, L. G. Millar, T. R. Pokorny, J. E. Overlin, and J. F. Moore. Committee — like those at all plants — represents all areas of activity at facility, provides shop and office level safety-conservation stimulus, upholding high Mat Con standards.

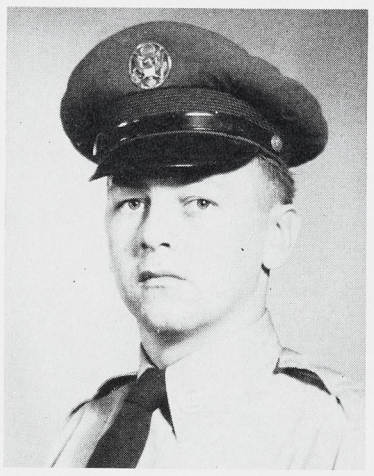
Ontario - - - Model Host



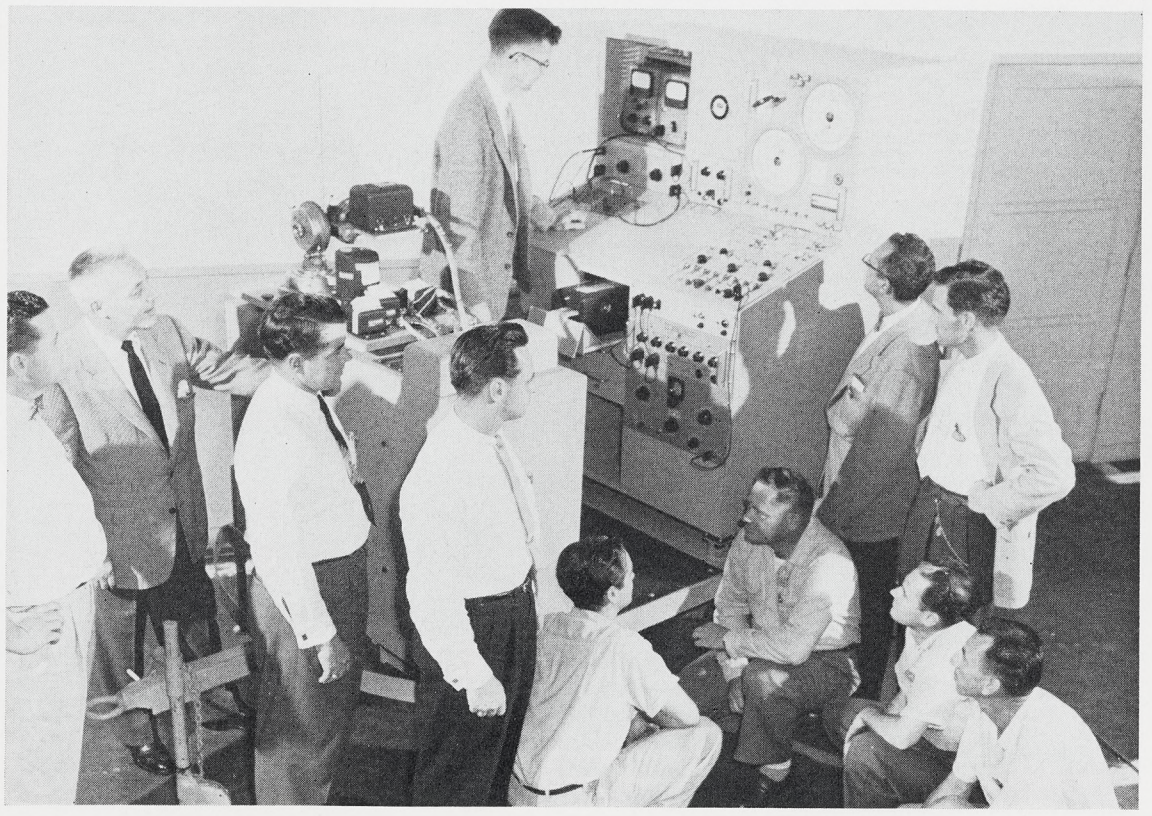
ONTARIO'S model airplane builders will play host to their fellows from other facilities on October 2 at meeting on Ontario base. (For details, see NRC President's column, Page 5). Photo shows Norcrafters at work on hobby. Junior Norcrafter Mike Hanna eyes job being done by Lou Casale, seated; standing are Gene Leedy, Ontario Model Airplane Club prexy, and Eddie Southwick. Casale is a past national title winner.

ALASKAN AIR COMMAND Airman of Month for June was Airman First Class Gerden O. Collins, of 64th Fighter Interceptor Squadron. In photo squadron commander Lieutenant Colonel E. J. Theisen, Northrop Tech Rep R. F. Schumacher, Collins, and Major General George R. Acheson are shown in presentation ceremony. Collins was instrumental in decreasing periodic inspection time on Scorpion by 112 hours.

HELPING Community Chest plan and organize industrial campaign this fall is Larry Long (left), Personnel department Norcrafter, who is shown with Robert Strother, Pacific Finance, and Jay Reed, Fluor Corporation. Norcrafters do their share for this agency through contributions — via payroll deduction — to AID program. AID sign-up forms are still available.



JULY winner of Airman of Month Award in Air Defense Command was Staff Sergeant John Dwyer, 82nd FIS, Presque Isle, Maine, Air Force Base...



CROSS-COUNTRY cooperation between Norcrafters in Plant Two, Hawthorne, and Patrick AFB, Florida, marked construction of missile test unit. Principals in manufacture of fixture are shown. At top: Frank DeBarry. From left, standing: Ben Webster, E. P. Hofstra, Dick Warner, Bob Emerson, Stan Bresenoff, and Tom Bilbo. Kneeling, front: Ray Konvick, W. R. Duffy, Nelson Montgomery, and Rudy Courrielche. Warner and Emerson were Florida reps when photo was taken; Bilbo is now at Patrick, too. Story—Page 1.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, October 12, 1955

NOR-AID Committees

(See Pages 4-5)

Air Safety in Design

NORTHROP REPRESENTATIVES recently participated in three-day conference of aircraft industry and USAF people on subject of how aircraft design aids accident prevention. Shown: R. B. Davidson, assistant chief, Structures; G. M. Russell, supervisor, Flight Safety; Frank Christofferson, chief, Experimental Flight Test; Lieutenant Colonel C. K. Miller, of Directorate of Flight Safety Research, USAF (which called meeting); Lew Nelson, Experimental Flight Test pilot; W. B. Laurie, assistant chief, Airframe and Mechanical Design; J. H. Kerr, chief of Associated Projects office; and R. N. Schneblin, of D/FSR. Meeting was the most important one of a series of twenty-two, D/FSR reps have stated.

Northrop-Anaheim and Reps of Air Force Hold Fruitful Conference on Sky Screen

HAWTHORNE AF OFFICE ALSO REPRESENTED

Northrop's Sky Screen, the display plotting board which screens and relays radar data for command decisions, was the subject of a week-long series of engineering-contracting conferences between Northrop and Air Force representatives recently.

These overall discussions and the actions taken by the participants represent, in reviewing their results, a model of government-industry teamwork in how to expedite an important defense production program.

Men involved—

For the Air Force, Project Engineers Francis M. Kelly and Albert G. Stritt from Rome Air Development Center; Contracting Officer Henry Seeds from Rome Air Force Depot; and the following representatives from AF's Resident Contracting Office at Northrop-Hawthorne — C. L. "Pat" O'Malley, deputy chief, Contract Division; John M. Pratt, deputy chief, Production Division; and W. C. Bankston, cost analyst.

Representing Northrop - Anaheim in the discussions—on engineering phases, Harold Black, director of Engineering; Ray Grill, chief of Development Engineering; Bob Ackerman, product engineer. In contracting phases — Tom Quayle, Anaheim Division assistant manager; Fran Gibian, General Office Administration manager; Don Vivrette, Contract Administration manager; and C. E. "Chuck" Howard, project contract administrator. Also on hand—Earl Rossomme.

Fundamentally, the conferences were held to resolve certain changes determined to be required in the Sky Screen following first-article testing by using AF forces in the field. For the most part, changes pertained to increasing illumination to meet new specifications; and to resolve improved chip marker requirement.

All changes, both engineering-wise and contractually, were successfully resolved during the conferences. Norcrafters in various parts of the plant are already well along in initial production work phases.

"It was a masterpiece of thorough teamwork in a hurry", comments Fran Gibian.

The Northrop Sky Screen

SKY SCREEN CLOSEUP—. In operation of Northrop's Sky Screen, useful in screening and relaying radar data vital to command decisions, as many as four — even more — operators can work around same unit (though not quite in this manner), tracing great numbers of flying objects. Left to right—Bob Ackerman, Northrop product engineer; Project Engineers Francis M. Kelly and Albert G. Stritt, Rome Air Development Center; and Harold Black, director of Engineering for Northrop-Anaheim. Here engineers examine Sky Screen beam-splitter during the recent conferences.

AIR FORCE SPARKS MAT CON MEETING

"CONSERVATION A WAY OF LIFE"

A nation-wide meeting of an estimated 1000 conservation specialists, sparked by the United States Air Force, has been under way during the past week. The meeting is part of a concerted effort on the part of military services and American industry to protect and preserve the country's basic resources.

Norcrafters Ray Wenger, Material Conservation coordinator; Ray Steele, representing Northrop factory departments, and Jim Scott, Conservation department, took part in the multiple-city program. Harry Fillmore represented the Northrop Air Force plant representatives office.

Convening first at Detroit, Michigan, under the banner of the Aircraft Industries Association's conservation panel, members from the air industry keyed conservation activities for the next year to the newly suggested slogan, "Conservation is a Way of Life".

From Detroit, the group adjourned to reconvene at St. Louis, Missouri, where they joined representatives from all American industry at the Jefferson Hotel for a two-day session with first objective of correlating manufacturing thinking to conservation-consciousness.

A 50-square-foot display booth, sponsored by Northrop, pointed up proven company techniques to obtain maximum material savings and minimum waste. Display theme was "Ten Keys to Conservation".

Wenger attended the AIA Detroit meeting. He was joined in St. Louis by Scott, Steele and Fillmore.

The Northrop Mat Con program has gained wide attention in the industry since its inception in 1951. Its successful dependence upon the voluntary cooperation of Norcrafters in shops and offices has drawn widespread interest.

New Entry Monday For Lot C Autos

Two major gates into the plant —vitally concerning Norcrafters who park in Lot "C"—will be closed next Monday, October 17.

Gates 6 and 6A, the Executive Advisory Committee on Parking has announced in a bulletin, will no longer be open to traffic. Norcrafters who normally use these entrances will find Gate 5A open for their use on Monday morning and thereafter.

Gate 5A is west of Gate 6, just past the lumber yard for traffic west-bound on Broadway.

Installation of a fence to the west of Plant Four and future planning needs have effected the closing of Gates 6 and 6A, the committee has explained.

Gate 4, just east of the Plant One cafeteria, will continue to be the exit gate for traffic from Lot C.

With the major gates formerly used no longer available, the entrance to Lot C located at the extreme east end of the area will also be closed.

Palmdale Section

Bowen Lauds Norcrafters For Top Production Job

Palmdale personnel last week received high compliments for their achievements in production flight test operations in an open letter from Vice-president Kenneth P. Bowen, Manufacturing.

"The Palmdale base has become one of the most outstanding production flight test operations in the industry," Bowen said.

There has been an "outstanding effort" by all Palmdale Norcrafters, Bowen wrote, in commenting on events dating from the transfer of Ontario flight activity to attainment of full schedule status at Palmdale.

Despite transitions from one contract to another, Palmdale Norcrafters have maintained an on-schedule status for 16 successive months, he pointed out, adding that the F-89 program in general has been on schedule for 39 months.

Briefly outlining projected activities for the base, Bowen stated that the future outlook for Palmdale was encouraging.

MILLION HOURS OF SAFETY-FIRST CHALKED UP AT END OF SEPTEMBER

Palmdale safety flash—! Palmdale personnel clocked in a new safety record for themselves during their Friday night shift, September 30.

On that night they reached 1,000,000 man-hours worked without a lost-time accident.

The new high for Palmdale was achieved through the work period since May of this year, according to Ken Selvidge, Safety engineer at the facility.

(Selvidge himself has been on full-time safety engineering duty at Palmdale for one year—October 4, 1954, being the anniversary date for his taking over full-time safety duties in behalf of Palmdale personnel.)

Palmdale safety groups have played key roles in sparkplugging the achievement. "Needless to say, though," adds Ken, "it takes everybody."

"H" SERIES began to reach Palmdale recently. One of Ralph Hiett's special and recent Industrial Training classes on "H" electronics included Floyd Kinney, "Morrie" Shirley, Bill Snell, Tony Serrone, "Frosty" Platts, "Red" Ecord, Forrest Houdesheldt, Chuck Gibbons, Bob Thayer, Harold Cline, Dominic Carbonara, D. W. Hosey, Fred Diefenderfer, Harold Crawford, Harold Brewer, Sid Tite, George Busby, Joe Hoffman, Ray Billings, F. J. Wilson, Earl Rowland and W. C. Oliver. New cycle of classes began this past Monday.

FIVE SMILES from left to right—Lois Viall, Ann Thomson, "Jake" Jacobson, "Hoppe" Hopson and Vern Ross, bowling champs as proven via recently finished NRC-Palmdale summer league play. Facility Bowling Commissioner Jacobson reports winter round is underway, but it's too early to talk of winners.

Down---Range

Ben Knell, Safety Engineering, has been asked by Dean L. M. K. Boelter, UCLA Department of Engineering, to serve on committee of Research and Education Section of Governor's Industrial Safety Conference . . . Committee, headed by H. K. Lambie, Kaiser Aluminum and Chemical Corporation safety consultant, will survey state's educational programs on accident prevention, outline requirements for additional courses . . .

STARLETTES, noted TV and radio quartet, will help entertain Management Club members, their wives and guests at MC dinner-dance, Ambassador Hotel, Saturday night.

Joseph K. Slap, Norcrafter engineer, was featured speaker at annual meeting of Association for Computing Machinery at University of Pennsylvania recently . . . Slap presented comparison of analog and high speed digital computing for specific aeronautical design question . . .

IAS confidential dinner meeting on Thursday, October 20, will feature L. P. Greene, North American Aerodynamics group leader, in discussion of "Development History of F-100", announcement from IAS headquarters reveals . . . Social hour, dinner precede formal meeting . . .

California Junior Chamber of Commerce Vice-President Stan Murnane, Structures engineer, represents that organization as observer at air power demonstration at Eglin AFB, Florida, as appointee of State JC Prexy Dick Fitzgerald . . . Members of press and numerous other groups throughout country are viewing tests at Eglin . . .

Genevieve Coulson, Operations Analysis, and Wesley Greayer, Engineering Laboratories, were recently elected secretary and treasurer, respectively, in Cerebral Palsy Center, Incorporated . . . a non-profit, non-sectarian organization established by parents and friends of cerebral palsy children to care for victims in the South Bay area.

POST-FLIGHT HOP SATURDAY NIGHT FOR PALMDALE

Palmdale's "Clubhouse Pre-Flight" dance just past was so successful, according to Sam Ponton, Palmdale Personnel Activities rep, that the "Post-Flight" has been set for next Saturday night, October 15.

The Post-Flight fact sheet shows the NRC Clubhouse as the location; 9:00 p.m. to 1:00 a.m. as the time; "live", swing combo music as the entertainment; and 50 cents as the ducat price.

Northrop Departments in Fire Prevention Efforts

Mrs. O'Leary's cow started something else besides the Chicago fire.

The historic upsetting of the milk pail and the lantern started one of the most time-honored and best supported "weeks" on the American scene—Fire Prevention Week, now under way—October 9-15.

Re-established each year by presidential proclamation, Fire Prevention Week is observed from coast to coast as the time to point up the wasteful damage that fire can cause.

Norcrafters, through the good offices of Safety Engineering, Mat Con's poster display boards and the Fire department, carried the message of Fire Prevention to all Norcrafters. Slogan: DON'T GIVE FIRE A PLACE TO LIGHT!

Jim Bartlett, Northrop fire inspector, lists for readers a few check points of fire prevention know-how.

On the job:

Check flammable liquid containers.

Become familiar with the labels on extinguishers and use as directed. Return for repair if damaged.

Dispose, per regulation, of oily rags.

Dispose of refuse via company barrels provided.

Memorize your fire zone.

Memorize procedure for reporting a fire.

Carry only book matches in plant areas.

At home:

Red labels on flammables, such as cleaning fluids, and use accordingly.

Do your garment cleaning in areas clear of open flames—pilot lights, heaters, others.

Should your frying pan catch on fire, avoid using water — water spreads grease flames.

The days of lanterns in big cities are over. But fire is still with us.

Controlled, it is one of the great blessings of mankind. Uncontrolled, it is a vicious foe.

Just "DON'T GIVE FIRE A PLACE TO LIGHT."

EDWARD CARTER IS ELECTED TO NORTHROP BOARD

Edward W. Carter, president of Broadway-Hale Stores, Inc., and outstanding Southern California community and business leader, has been elected to the board of directors of Northrop Aircraft, Inc., according to announcement by Whitley C. Collins, president.

Election of Carter increases Northrop's board to its full complement of 11 members.

In addition to serving as chief executive of one of California's leading department store chains, Carter is president of the Southern California Symphony Association, vice-president of the Downtown Business Men's Association, treasurer of the All Year Club of Southern California and a member of the governing boards of both the University of California and Occidental College.

A California resident for more than 30 years, Carter also holds directorships in several major community organizations.

AIEE Technical Meeting Slated October 25 to 27

A number of Northrop members of the American Institute of Electrical Engineers—plus other Norcrafters interested in aircraft electrical developments—are expected to attend the AIEE Technical Conference on October 25, 26, and 27.

Heading the conference committee is Frank Lyons, chief of Electrical Design at Northrop, who announces that the meeting, technical highlight of the year for the aircraft electrical field, will be held in the Hollywood Roosevelt Hotel.

Norcrafter engineers are participating in the program.

V. M. Urban, Engineering Laboratories, is presenting one of the 25 papers selected for the program. His presentation will cover "New Requirements for AC Ground Power Supplies".

C. L. Hennigan, Electrical Design, has also had a paper chosen for presentation. His study is entitled "An Investigation of Temperature Controllers for Windshield Anti-Icing".

In addition to Conference Chairman Lyons, three other engineers are on the general committee: E. A. Freitas on Finance; Otto Baumann, jr., as Secretary; and Doug Stephens on Field Trips. All are from Electrical Design.

Featured speaker of the conference is Brigadier General Leighton I. Davis, commander, Holloman Air Development Center, who speaks at a luncheon to be held on Wednesday, October 26, at the IAS Building.

Conference attendees will find other "bonuses", Lyons said. They will have the opportunity to attend the annual Aircraft Electrical Society display meeting, being held October 27-28 at the Pan-Pacific.

Several interesting field trips have been planned, including tours of Disneyland, Knott's Berry Farm, and CBS-TV.

Northrop News

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BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — Wednesday noon before publication.

FOR SALE

GOLF EQUIPMENT, Spalding, 4 Top Flite matched woods, Sure-Flite irons (2 to 9), H. & B. Louisville-Powerbuilt putter, bag, cost $191, sell $75. Write to Northrop News, Box 412. A

WASHER, Bendix (new type) used less than two years, excellent condition. $75. Call after 5 p.m. B. C. WEBSTER, EA 2-2643 after 5 p.m. A

HOUSE AND LOT, 40x150, close to Northrop, $7750. TOM ESTERBROOK, OS 6-8444. A

BOAT, 10 ft. Wizard glass, 5½ H.P. Evinrude motor, car-top carrier, $200; Sears builder model TABLE SAW, 2 H.P. motor, all attachments, $165. BEN BLACK, TO 2-7298. A

ROD AND REEL, 1955, 8 ft. Glass deep sea. Used twice. $44, new, $30; also BOWLING BALL, men's, $10. T. M. ROWLANDS, OS 5-1851. A

KNIT DRESSES, three, size 12, one powder blue 2-piece, scoop collar, angora trim; yellow 2-piece, sweater neckline; sea-foam green, pearl trim 1-piece cocktail dress; all worn only few times, reasonable. R. BUNDY, PL. 3-8758 between 3 and 4 p.m. weekdays. A

DINETTE SET, table, four chairs, walnut finish top, one leaf, custom-made pads, complete set $32. M. T. NORTHRUP, AX 1-6653. A

WEDDING RING SET, diamond engagement and wedding ring, original price $250, $100 cash. DOROTHY E. MYHRE, OS 6-3148, after 5 P.M. A

RUG, 9'x12' solid green, shows no wear, cost $120. $50, or make offer. CHARLIE DE LISLE, OX 7-8258. A

AUTOMATIC WASHER, 1953 Maytag. Excellent condition. OS 6-7144 after 5 P.M. A

POODLE PUPPIES, males and females, all colors, miniature, toys, $100 up. R. E. SOUDERS, FR 2-5135 after 5 p.m. A

HI-FI 12" coaxial loudspeaker, Permoflux, 40 to 15,000 cps. response, costs $49.50. $25. KURT W. PESTER, AX 1-0838 after 5 P.M. A

MOVIE CAMERA, Bell and Howell, 8mm, Sportster, F-2.5 lens, uses roll film, F-3.5 Telefoto lens 36mm focal length, camera and both lenses, $40. J. D. WILLSON, GR 2-6621. A

PACKARD, 1936, 8-120, $50. R. H. CHAMBERS, OR 7-7714. A

DE SOTO. 1950 custom coupe. fluid drive, $490. T. CANTOR, FR 9-8757. A

WALL TENT, 8'x10' with poles and pegs; 8'x10' TARPAULIN; two 6' COTS; four 4' COTS; Coleman 2-burner GASOLINE STOVE; Coleman LANTERN, all items, $100. VIRGINIA TURNER. Write to Northrop News, Box 418. A

CAMERA, Mercury II 35mm with flash, leather case, good condition. Best offer. BARBARA LANGFORD, OR 7-5737. A

CONVERTER, Carter, 32V—6 amp. input 115 V—1 amp. 60 cycle output, like new, $30. EDWARD G. BODEN, DU 3-7874. A

CABINET, corner cupboard, glass doors and drawers; 2-piece LIVING ROOM SET, sofa and chair, sell cheap, moving. TO 4-5554. A

BOXER PUPPY, 5 mo., fawn, female, cropped, $50. B. WOOD, OS 5-4357. A

MERCURY, 1950, fully customized, $900. WILLIAM CICERONE, PL 2-9486. A

SKIRTS for '49, '50 and '51 Mercury, good condition. $8. RICHARD MELENDREZ. AD 2-7819. A

MACHINIST'S TOOLS, complete kit, including dial indicator, hole gages, 7-drawer Kennedy tool box, plywood cabinet (with drawers) for tool box, drill vise, etc. Total value over $350. Entire lot $165. D. G. HOGARTH, NE 2-9815. A

STUDEBAKER, 1955 Regal Deluxe Club Coupe, automatic transmission. JOHN BOLL, OS 5-2572. A

REFRIGERATOR, 7.4 ft. Coldspot; 1 single and 1 double HOLLYWOOD BED, complete; DINETTE TABLE; DINING TABLE; DESK; GAS HEATER; floor LAMPS; large assortment MAGAZINES and paper back BOOKS, reasonable. D. D. GRANT, OR 8-9701. A

RUG, 10'x16' all wool green tone on tone, $80; Emerick 5 in 1 POWER WORKSHOP complete with motor and bench, $40. MRS. GAUDETTE, DA 9-4220 after 6 p.m. or week-ends. A

T.V. 1955 Admiral table model, 17", used one month. Best reasonable offer. E. J. CURRIER, DA 4-8061. A

RANCH, Monument, Eastern Oregon, cattle country on John Day River, 2000 ft. elevation, excellent hunting, fishing, 1000 acres, 225 acres cultivated, new modern house, garage, bunkhouse, storage building, granary, workshop, barn, state highway, $40,000. THOMAS E. MILLER. Write to Northrop News, Box 413. A

STUDEBAKER, 1950 Landcruiser, make offer. W. T. FERRIS, PL 5-4114. A

VACUUM, Westinghouse electric, large size, all accessories, like new, $50; other HOUSEHOLD ITEMS. H. A. SIMS, FR 2-1076. A

RADIO-PHONOGRAPH combination, floor model, Philco. E. W. EVERLEY, OR 1-2774. A

HOUSE, 3-bedroom, 120x60 corner lot, sprinkler system, fences, w/w carpeting, insulation, drapes, $1450 for equity, $68.84 month payments. Gardena. DA 9-6983. A

FLAT BED TRAILER, 4'x6', needs tubes, $15; TRICYCLE, 3-year size, $2; HOUSE TRAILER, 15' Crown 1952, $500; MULTILITH 1260, $500; VARITYPE A-20, with 10 faces, $450; Kelsey HANDPRESS, type, accessories, $55; MIMEOGRAPH model 90, $100; IBM electric TYPEWRITER, $110. LESLIE MATTHIES, LA 5-1959, Fullerton. A

WOOD LATHE, 3', Timken bearings throughout, assorted cutting chisels, $20. JOHN PARQUE, LO 6-1147. A

HOME, modern, secluded, desirable view, top of Benedict Canyon, Beverly Hills, 2 bedroom, den, picture windows, rural atmosphere. Write to Northrop News. Box 410. A

HOUSE, 3-bedroom, 2 baths, 1 block from Broadway, Westchester, will G.I. OR 1-2663. A

MILLIAMP METER, Prission Volt OHM, like new. less battery, $35. HARRY I. BOARDMAN. EA 2-1648. A

BICYCLE. girl's 24" J. C. Higgins, nearly new, reasonable. E. F. MALCOLM, WI 7-4583, Palmdale. A

FORD, 1947 Tudor, $275, or make offer. DON BULL, FR 4-1152. A

UMBRELLA TENT, 7'x7', awning, waterproof, center pole and stakes inc., used once. R. D. GIMBRONE, DA 6-0340. A

SHOTGUN, Winchester model 42, .410 ga., 5-shot pump, modified choke, used twice, $70. D. H. DAVIS, PL 6-0015. A

MOTORCYCLE, 1948 Ariel, good condition. overdrive, $875. JOHN G. HOFFACKER, OR 4-1608. A

CHEVROLET, '48 sedan, 2-door, $235. PL. 6-1069. A

HENRY J, 1951. $350. WALDO P. CLOTT, DA 9-6923. A

OLDSMOBILE, 1951, 88 convertible, $950; 12½" Zenith TV, RECORD PLAYER and RADIO combination, mahogany cabinet, $65. D. P. VICKERY. OR 4-0145. A

CUSTOM CRUISER, 28', sleeps 6, SS radio, outrigger, top shape, re-built Mercury engine, $4900. PHIL WASIELE, RE 3-6502. A

SOFA AND CHAIR, rose frieze, $15. REX GAMBLE. FR 5-5782. A

ELECTRIC STOVE, G. E., clock control, deep well, Calrod units. beautiful condition, $45. JANE RAYSON, NE 1-6933.

SHOPSMITH and accessories, seldom used, 50% of original value. W. M. LANNING, OR 1-8555. A

PIANO, small, A-1 condition, $90. T. F. KING, DA 4-8260. A

OLDSMOBILE, '49, V-8 De Luxe Sedanette, $395. OS 6-4008 after 3 p.m. A

BOAT, 8' Prame, fiber glassed, reinforced oar locks and seats, shock motor mount, $85; like new Craftsman electric SANDER and POLISHER, 6 month guarantee, $23. J. L. GREEN. Write to Northrop News, Box 406. A

FORD, 1953 2-door Customline, $945 or best offer. PAUL CLAY. Write to Northrop News, Box 405. A

PLYMOUTH, 1950 business coupe, $375. FR 4-1309 after 4:30 p.m. A

ICE SKATES, CCM, ladies', size 9, white, $10; men's, size 10, black, shoes only, $2.50. GORDON D. MADISON. Write to Northrop News, Box 404. A

BICYCLE, Girl's, 26", almost new, cost $65, $30. DA 9-6981. A

CONTOUR CHAIR, green and gray, excellent condition, cost $75, $25. C. B. PRUITT. OS 5-2491. A

AUTOMATIC WASHER, 4 years old, $45. WM. S. COOK, SU 1-9678 after 6:30 P.M. A

STUDEBAKER, 1948 Champion convertible, overdrive, $275. OS 5-1847. A

VANITY DRESSER, blonde wood, cost $98, like new, $35. LEMPI S. CALOF, OR 1-3229. A

SPACE HEATER, 20,000 BTU, gas with new flexible connection hose and shut off valve, $7.50; WINDOW COOLER, like new Firestone auto, water, fits any car with center post, $5. JACK CALOF, OR 1-3229 after 5 p.m. A

FREEZER, International Harvester chest type, 18 cubic feet, used 1 yr., cost $511 $200. BOYD W. HUNTER, DA 4-9517. A

RANGE Universal high oven, $25; tubular steel BEDSTEAD, springs, newly renovated mattress, $20. R. A. AHRENDTS, OR 7-5674. after 4 p.m. A

HOUSE TRAILER 1953, 36', all metal glider, fully furnished, like new, Rheem hot water and Duo-Therm heaters. Was $5000, now $2600. Cash or terms. JACK VAN ORDEN, LE 9-9276. A

WARDROBE TRUNK, good condition, $15. B. P. BRADY, DA 9-5646. A

MIXMASTER. two bowls, juicer attachment. good condition, $18. LEE B. JOHNSON, FR 5-4910. A

ROOM COOLER, utility, never used, new price $50 $20. W. DEDON, EX 4-1982.

GUN, model 99 Savage, .250-3000, with 2½ power Weaver scope, 3 boxes ammo, like new, $100. W. C. GAMBLE. Write to Northrop News, Box 403. A

WHEELS, 2 Ford 15", $7; '49 Merc STEERING WHEEL, $10; '41 Graham SUPER CHARGER, $20; '32 Ford GRILL and SHELL, $10. W. I. WORRALL. Write to Northrop News. Box 402. A

SUN LAMP, Sperti Upright, combination sun lamp and heat lamp, used twice, reasonable. OR 8-8572 mornings. A

OLDSMOBILE, '53, super 88, club coupe, power brakes, $1595, no trade. EX 5-0270. evenings only. A

TYPEWRITER; BANJO; UKELELE; TENOR GUITAR; WAFFLE IRONS; ELECTRIC BROILER; VIOLIN. J. H. BUSH, OS 6-6449. A

POGO STICK, $4, 150 lb. limit; BLACKBOARD with seat, $3; COWBOY SUIT, Roy Rogers, red and black, size 10, cost $10.95. $5; CUB SCOUT shirt, neckerchief, worn 3 times, size 10, $2.. J. BUTLER, OR 2-1570. A

EQUITY in membership to Vic Tanny's gym, 14 months balance for $75, present cost of new membership $155. Write to Northrop News, Box 401. A

LAND, 3½ acres, South Laguna, all util. adj., $1195 per acre. DICK BARRETT, FR 5-4011. A

OFFICE DESK AND CHAIR, oak, $10; Jr. SWING SET, $5, good condition. PAT HOY. Write to Northrop News, Box 419.

ADDING MACHINE and CASH DRAWER combination, $75. WALTER MASCHKE, OR 2-7648. A

LINCOLN CAPRI, 1954, continental kit, can finance $2200, $3000. McCLEAN. CR 6-6326. A

DOOR LOCKS, electric, never used, fit any car, $12.95. ART PERSKY, DI 3-7081.

LIVING ROOM SUITE, rose, clean, good condition, $50. OR 1-8901. A

BAR BELL SET, 100 pound, $15; LAWN SWING FRAME needs cover, $15; small Upright PIANO, $225. H. DAWSON, FR 5-3894. A

SNOW SKIS. Cubco safety bindings, poles, excellent condition, $40. ED CIOTTI, NE 1-4939, call before 3:00 p.m.

TABLE SAW, Craftsman 8", ¾ h.p. motor, 2 blades, sanding discs, 38x34" table, $85; TV 10" Zenith, new picture tube, $20; PROJECTOR, sound, 16mm, Bell & Howell, 2 12" speakers, screen, extras, $400; EXPOSURE METER, Norwood Director, sphere and grid for cine, $20. C. M. OLSON, OS 5-6500. A

VANITY, blonde wood, good condition, best offer. DAVE BARRETT. Write to Northrop News, Box 431. A

REFRIGERATOR, Frigidaire, 8 years left on guarantee; BOX SPRINGS and MATTRESS, legs; HIGH CHAIR; COUCH AND CHAIR, makes bed; BASSINETTE, pad, folding type, all good condition, reasonable; ELECTRIC DRYER, Bendix, 1954 model, $70 or make offer. JACK D. MORRISON. Write to Northrop News, Box 411. A

SOUND PROJECTOR, Ampro-Stylist 16 M.M. Never used, retails $419, $300. RAMONA MORGAN, PL 1-7164. A

ELECTRIC STOVE, Westinghouse, four burners, approx. 4 years, good condition, $97.50. DWIGHT HANSEN, LEHigh 9-9590. A

PONTIAC, 1948. 4-door, $300. MAX COREY, OR 4-1301, after 6 p.m. A

TV, console 12"; 10" table model, very reasonable; FM TUNER. ROBERT M. FRANKS, PL 5-2103, after 5 p.m. and week ends. A

CAMERA, 1954 Pacemaker Speed Graphic, 4x5, 135mm f 4.7 Optar lens, Kalart rangefinder. Graflex flash, film holders, roll film back, case. $250. R. L. CARBERRY, OR 4-2669. A

BUICK, '54 Century 4-door, $900 for my $2200 equity. DA 6-7668. A

BOAT, 19' Ladd cabin, two bunks, glassed bottom, V-8 power, bait tank, $1275. R. H. GRAMMER, OR 2-8537. A

WASHING MACHINE. ABC O-matic, 3 years old, good condition, $65. JOE M. MILLER, FR 9-3697. A

FORD, 1954 2-dr. sedan, can make payment to suit. $1400. R. G. BROWN. Write to Northrop News, Box 428. A

LADIES APPAREL, size 12, tailored to fit 22 to 24 waist, Cocoa brown gab. suit; black French taffeta original 2-piece dress suit; charcoal gray skirt, reasonable. DA 6-4425. A

CHAIRS. occasional, two matching modern grey nylon boucle, mahogany trim, like new, $65. JEANNE SILER, DA 9-6643. A

CADILLAC, 1949 62 4-door, $695. DARRELL REDFERN. Write to Northrop News, Box 426. A

FORD, 1941, V-8. panel truck. $100. Terms if desired. E. L. ROGERS, WI 7-4753, Palmdale. A

HOUSE TRAILER, 1953 General, 28½ ft., bathroom, very clean, $800 and take over payments, cheaper for cash. G. KINET. Write to Northrop News, Box 425. A

HOUSE, 3-bedroom, attached garage, fenced back yard, lot 54x100, close to public school, low down payment. CHARLES LYONS. Write to Northrop News, Box 423. A

HOUSE, Palos Verdes Estates, 2 bedrooms, P.V. stone patio, fireplace, double garage, fruit trees, near school. FHA commitment $65 per month plus taxes, $4800 down. J. B. McDONALD, FR 5-2450. A

PLYMOUTH, 1941 business coupe, $80. TOM HOWELL, FR 2-1962. A

BOXER PUPS, fawn, 6 wks old, pedigreed, excellent show prospects. BETTY KEETON, NE 8-1722, after 4:30 p.m. A

ENGLISH FORD, 1952, Zephyr 6-cyl. 4-door, $500; Polaroid Land CAMERA, light meter, flash attachment nearly new, $70. E. H. RICHARDSON, OS 6-4827. A

MG, 1952, rebuilt engine, $1050. D. W. LINDER. Write to Northrop News, Box 422. A

DEEP FRY AND COOKER, fully automatic, Southern Electric, 5½ qt., $12, like new; Maytag WASHER, wringer type, $25. E. GRIFFIN, OS 6-3862. A

STUDEBAKER, 1940 Champion, $50. W. P. CLOTT, DA 9-6923. A

DODGE, 1953 6 station wagon, standard shift, best offer. L. NOVAK, PL 1-8170.

FORD, 1950, Custom 4-door, overdrive, $475. D. D. SIKORSKI, OS 6-3110. A

BATHINETTE, plastic and aluminum, $8. Write to Northrop News, Box 421. A

FURNITURE, Philippine mahogany bedroom set; desk; Duncan-Phyfe lamp table, baby crib pottie-chair, gas heater (like new), dressing table, apartment-size ironing board, coat rack. B. J. TAYLOR, PL 9-3562. A

GAS REFRIGERATOR, Servel, good condition, $52.50; 1950 MERCURY 4-dr, white sidewalls. $575. R. G. ECKLES, OR 1-5046. A

BED DIVAN AND CHAIRS, dusty rose, nearly new, $100. LUCILLE E. STAGGS, FR 2-7305, mornings; FR 4-4467, 6-8 p.m. A

PISTOL, Mauser military, takes 9m/m Luger shells, $65; .32 cal. Schwartzgose automatic forward moving barrel type, $45; RADIO GEAR, SCR 522 for 2 meters with tubes, $25; ATB 50 watt MOBILE TRANSMITTER, RCA, $50. T. W. WILLIAMS. Write to Northrop News, Box 420. A

DE SOTO '41. needs small repair, $45 or best offer. SAM RUDERMAN, TO 6-5624. A

FURNITURE, Duncan-Phyfe dining set, mahogany, consisting of drop-leaf table, extension boards, protective pad, credenza, four chairs; kidney desk, walnut, plate-glass top; gas range, 4 burner apartment size; sofa and matching chair, rose frieze. $50. E. W. BURTON, PL 5-4258. A

TV SET, 17" Packard Bell mahogany cabinet with doors, TV needs tube, $75. IRMA NIKODEM, OR 2-6998 after 6 p.m.

FORD, 1931. New tires. OR 2-9206. A

WASHING MACHINE, Monitor apartment size with fold-a-way wringer, excellent condition, $25. JOHN W. WEBER, OS 5-7081. A

TOPCOAT, man's, light brown, size 40-42, Height 5'10"; Ladies' Canadian Hudson Seal (black) CAPE, size 12-14; ROTO BROIL "400" used only 3 times; electric heating BLANKET practically new; Japanese BINOCULARS; 6 wooden DRAWERS, length 26", width 24", height 6". OR 4-4032. A

FORD, 1941 Convertible, $195. TONY MORETTI, NE 8-2334. A

SCOOTER, 1952 Cushman, good condition, $100. B. J. UNDERWOOD, OS 6-8401. A

MEN'S DRESS SUITS, 5, 40 reg. 32W 31 length, 1 black, 1 brown Dappionni silk; 1 grey, 1 brown Louis Roth wool worsted; charcoal Neiman-Marcus wool worsted, 15 ties free to buyer, all three buttons, short lapel, bought Spring of '54, $550 value, $175; Diamond engagement and wedding RING, 11 diamonds, original cost $225, $75 cash. CHUCK SMITH, OS 5-6308. A

MG TD, 1952, new paint. Make offer. 1/LT. LLOYD WYNROTH. FR 9-6289. A

MERCURY, 1949. overdrive, terms. $495. FA 8-3306. A

DODGE, 1939, $40. J. D. MURPHREE, OS 6-6686. A

LAWN MOWER (recently sharpened), $10; PLATFORM ROCKER, $30. KAROLL SHURTZ, OS 6-0393. A

FLOOR SANDERS, two 1½ horsepower commercial; two ¾ horsepower edgers with enough sandpaper to do several houses, reasonable. O. PELLICAN, JR., OS 6-3432. A

SPEED GRAPHIC 4x5, Xenar F 4.5 lens, flash attachment, $110; 2 WIDE ANGLE LENS, Bausch & Lomb, 11-3/16 & Aldis Trio x2; 2 PORTRAIT LENS, Bausch & Lomb 8x10 & Kodak F 4.5 3¼x4¼, make offer on lens; OLDSMOBILE, '41, 2-dr. coupe, 6 cyl. hydramatic, $140; Electric steel GUITAR, "Kay," new strings, $65. L. W. RICHIE, LIberty 8-4321. A

NASH, 1948, 4-door, $275. W. L. LIBERTY, Lambert 5-6027, Fullerton. A

FORD, 1947 Tudor super deluxe, $200; FURNITURE, 2 living room chairs, $50; dining table. 6 chairs, buffet, hardwood, $20; maple drop leaf table, $3.50. D. R. BULL, FR 4-1152. A

DAVENPORT & CHAIR, $20; mahogany COFFEE TABLE, 2 LAMP TABLES with glass tops, $75 for 3 or sell separately; MATTRESS, innerspring, $15. MAX STERN DA 4-6748. A

IRONS, one steam, one electric, $10 for both; VACUUM CLEANER. tank type, $10; PLAY HOUSE, 5'x8', 5½' ceiling, $100; Adlermatic SEWING MACHINE, 2 yrs. old, cost $450, $200. B. SHEARER, OS 6-0334, after 4:30 p.m. A

RECORD PLAYER, R.C.A. 45 R.P.M. plays thru. TV or radio, $10; Toy Fox Terrier PUPS two, 8 mos. old, male and female, $25 each. V. S. HANCOCK, OS 6-2123. A

GENERATOR, 1500 watt, 24 volt, air cooled, 2 cylinder gas engine driven, 1st class condition, $125. ELI COLE, DA 6-1457. A

GOLF CLUBS. 4 Wilson woods, 6 Spalding irons, bag, $25. PAUL W. GREEN, OR 7-3473, call 5-6 p.m. A

CAR HEATER, South Wind gasoline, excellent condition, $10. W. WAGNER, VE 8-4512. A

DODGE TRUCK, flatbed, one and a half ton, '43 model. OS 6-6856, evenings. A

STUDEBAKER, 1951 Commander V-8, automatic transmission. $525; 2 wheel BOX TRAILER, 4'x7' bed, $45; child's TOY CAR, $3; pedal toy TRACTOR and TRAILER, $12; boys 28" BIKE, $12. PHIL SOKOLOWSKI, FR 9-8108. A

LAND, 1-1/10 acres, close to Riverside, low down, monthly payments. LEO W. DAY. Write to Northrop News, Box 433. A

STOP WATCH, 100's of minute, used very little, perfect condition, reasonable. J. M. DRIVER. OR 5-3901. A

WATER SOFTENER, family size Revere, plus one year supply softener compound, used less than one year, original cost $300. $125. E. J. MOORE, OS 6-2597. A

WANTED TO BUY

WIRE RECORDER or TAPE RECORDER, don't need Hi-Fi. EVANS, AX 4-7304. B

BICYCLES, boy's 16" and girl's 20"; and BENCH VISE. B. P. BRADY, DA 9-5646. B

CAR RACK for carrying surf board, cannot be basket type, must lay flat on roof of car, reasonable. TONY MORETTI, NE 8-2334. B

MODEL RAILROAD, American Flyer "S" Gage or Lionel, etc. EDMUND F. BURKE. Write to Northrop News, Box 408. B

OVERCOAT one man's size 38 or 40; one woman's overcoat, size 34. CLISBY. Write to Northrop News, Box 407. B

PING PONG TABLE, with or without accessories; BICYCLE, lightweight or balloon. ARMIN LIEBICH, PL 2-9597. B

CHILD'S PLAYHOUSE, at least 9'x5'x6' high, reasonable. R. V. GIMBRONE, DA 6-0340. B

CAR, 1948, 1949 or 1950 model, 2-door or sedan, Ford, Plymouth or Dodge, must be in good condition, R & H desired, up to $350. KENNETH B. YOST, TO 2-2814. B

BOAT TRAILER for 17 ft inboard speedboat. V. BERTAGNA, PL 4-6974. B

MOTORCYCLE, good used, no big Harleys. OR 1-7458, before 3:30 p.m. B

QUARTER HORSE, young, broken or not, other colts considered; also interested in cheap good older horses. WILLIAM SNELL. Write to Northrop News, Box 416. B

BASSINETTE-BABY CARRIAGE-CAR SEAT combination, good condition, reasonable. OR 7-8868, after 5 p.m. B

METRONOME good used. S. M. SIMPSON. OR 2-8076. B

VIOLIN, good, used, for invalid, must be reasonable. GAYLOR O'LEXEY, OR 1-9633. B

LOT, in Inglewood area, 60x150, or? DAVID L. YOUNG, OR 7-3602. relatives.

CAMERA, used 35mm, coupled range finder focusing. must be in good condition, reasonable. E. F. LAXTON. OS 5-4559. B

AUTOMOBILE. '46-'50 Ford, Chevrolet, or Plymouth in excellent condition only. Reasonable. PAUL T. NELSON, HO 9-6955. B

HOUSE, Will pay cash for clean 2-bedroom or 3-bedroom house not over 30 min. drive from plant 3. Give full details in letter. Write to Northrop News, Box 429. B

FORD, 1950 club coupe, must be clean, no bad dents, R. & H. desired, $450-$550. BOB BROMLEY. OR 7-0354. B

VENDING MACHINES, used Acorn, parts or equipment. ROD WILKES, EX 8-2488.

INSTRUMENT AMPLIFIER, Musician's 18 or 20-watt, with 12" or 15" speaker. D. F. CONINE. Write to Northrop News, Box 435. B

DRAFTING MACHINE or straight edge (with pulleys). T. W. WILLIAMS. Write to Northrop News, Box 434. B

FOR TRADE

TV, 17 inch Silvertone; '37 FORD, 4-door sedan; Philco table RADIO, trade for rug, rollaway bed or living room furn. PL 8-0835. C

PORTABLE TYPEWRITER, elite type, trade for portable typewriter pica type. M. ORTH. Write to Northrop News, Box 424. C

HOME, 3 bedroom, Anaheim, garbage disposal, large patio, 6 months old, will trade my equity for equity in home within 10 mile radius of Hawthorne plant. R. G. HOLBERT, KEystone 3-1678.

MEMBERSHIP, one full year in Vic Tannys Gyms, $35, original price $85; or trade for 5 gal. fish tank, complete with air pump and light reflector, and/or finger trained parakeet and cage. ELLA L. SANDERS, OS 6-9637, after 5 p.m. week days, week ends. C

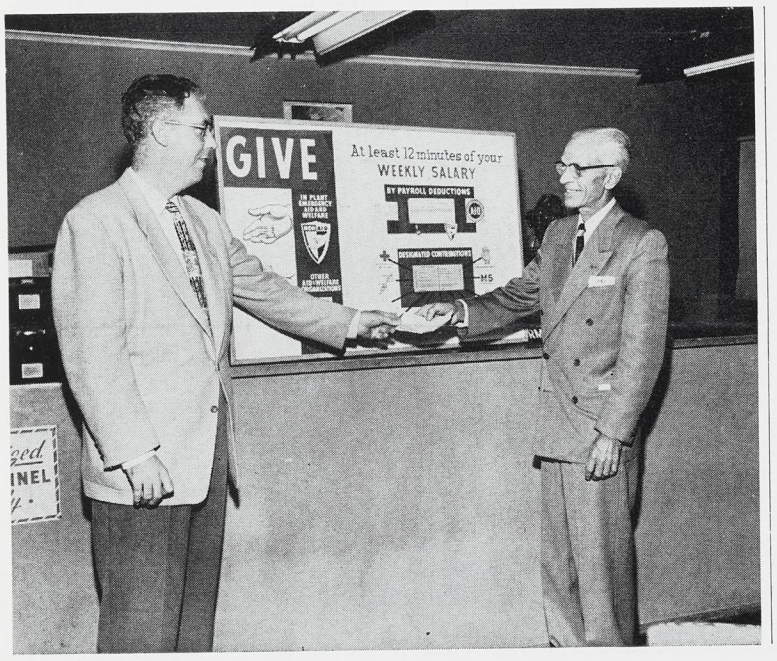
FREE (To be given away)

DOG, mixed Collie and German Shepherd, good around children, 1 year old. SUE THURMOND, AX 1-0483. D

(Continued on Page 6)

NOR-AID OFFICIALS NAMED

NOR-AID BOARD OF DIRECTORS—. Following incorporation of Northrop-sponsored NOR-AID charity, the above group was appointed to govern program as board of directors. From left: Charles Boyle, manager, Personnel Activities and Services Administration; Paul Wierk, chief, Engineering Administration; George Gore, corporation counsel; Chairman Roland R. Pagen, Northrop vice-president, Finance; John B. Clark, director, Industrial Relations; A. V. Cline, director, Public Relations; C. B. Spencer, Factory manager. Details in story.



IMPRESSIVE majority—. By a recent ballot, Northrop Management Club members voted to distribute long standing charity fund to NOR-AID. Here MC President Scotty Smith, left, delivers check to NOR-AID Administrator Mal Mountain, Personnel Activities, who will administer NOR-AID program in coordination with NOR-AID board of directors and all facility committees.

PRESIDENT COLLINS APPOINTS DIRECTORS FOR PROGRAM

NOR-AID — Norcrafter-sponsored charity program — has been in planning stages for nearly one year. With all procedures and processes now complete and ready for service, the Northrop News presents first photos of officials and committees.

Unqualified support of NOR-AID by Norcrafters has been in evidence since the plan went into the very first blueprint stages.

Plant response is typified by Northrop Management Club membership action in electing to contribute all accrued charity monies to the NOR-AID fund by an overwhelming majority.

The NOR-AID charity plan applies on the same basis for all Northrop facilities. Although the plan has been in active operation for only a few weeks, needy cases have already been interviewed, and funds granted.

A short history of NOR-AID reveals the following time table: The first official discussion and communication was in November of 1954.

Adoption of the program was announced by President Collins on May 2, 1955.

By-laws were drawn up in the subsequent months.

Department clerks were indoctrinated and sign-up cards were issued to all personnel in July of 1955.

The program went into effect and first contributions were received in August.

Articles of incorporation became official in September.

Information on NOR-AID sign-up forms, whereby Norcrafters may sign up for contributions—if they have not already done so—is available from all department clerks or from Personnel Activities offices, all facilities. Provisions are also made by means of which present contributions may be increased.

The first directors of the newly established NOR-AID corporation have been appointed by Northrop President Whitley C. Collins.

The NOR-AID Board of Directors appointments include: Vice-president, Finance, Roland R. Pagen, chairman; George Gore, corporation counsel; John B. Clark, director, Industrial Relations; C. B. Spencer, Factory manager; Paul O. Wierk, chief, Engineering Administration; Albert V. Cline, director, Public Relations; and Charles Boyle, manager, Personnel Activities nad Services Administration.

Mal Mountain, Personnel Activities, was appointed Administrator, in charge of administering the NOR-AID program in coordination with the board of directors and the facility committees.

George Forbes, paymaster and Hawthorne facility NOR-AID committee member, was also appointed treasurer of NOR-AID, Inc.

The NOR-AID bookkeeping assignment went to Ernie Boren, General Accounting.

The board of directors, officers, as well as the committee members will serve without compensation, nor may they receive any distribution from the fund.

Facility committees recently appointed by various base administrators and executive officers are shown on opposite page.

NOR-AID Regulations Established For Equitable Disbursement of Funds

CHARITY DATA DEEMED 'NORTHROP PRIVATE'

The recent incorporation of NOR-AID — the Northrop-sponsored charity agency for Norcrafters—climaxed a period of intensive planning and research dating as far back as November of 1954.

Prior to the letter to all Norcrafters from President Whitley C. Collins on May 2, 1955—which announced Northrop's enlistment in the AID program and the adoption of NOR-AID—there were months of preparation for this in-plant charity program.

Following the final adoption of the AID-NOR-AID plan at Northrop, NOR-AID was incorporated pursuant to the General Non-Profit Corporation Law for these specific and primary purposes: to accept contributions from personnel of Northrop Aircraft, Inc., and any other source; to set aside these contributions in a charity fund; and to administer and make charitable distributions from this fund to needy personnel of Northrop Aircraft and their dependents or survivors.

Quoted below are excerpts from the regulations to be followed by all committees in distributing the NOR-AID contributions to Norcrafters in need.

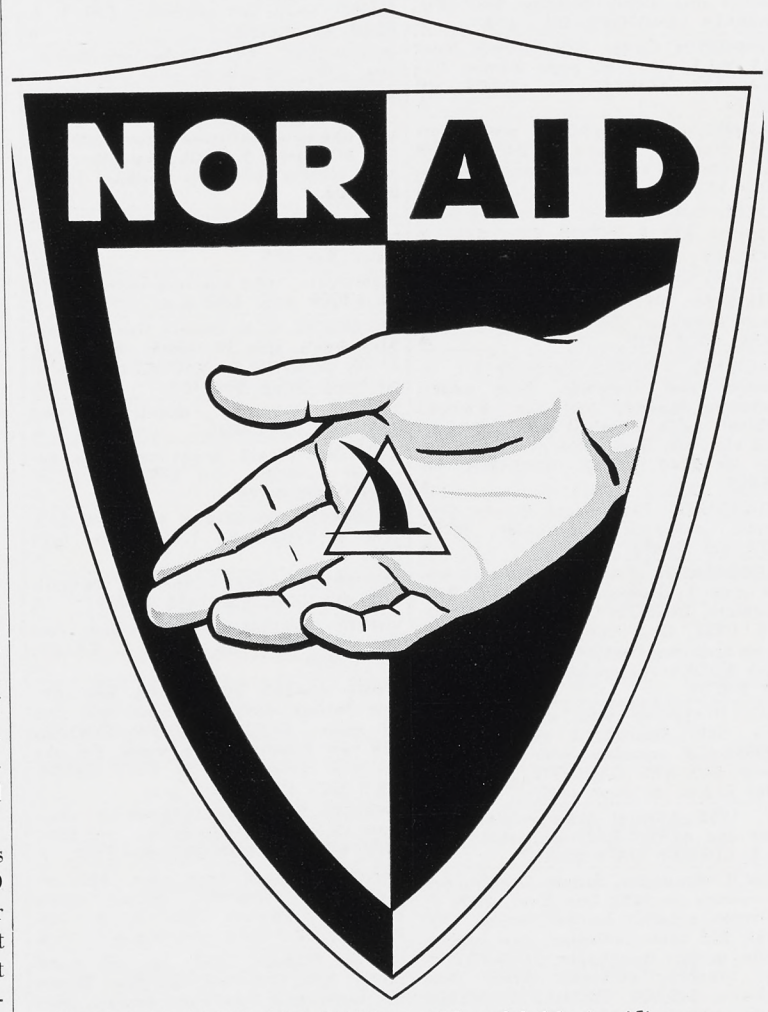
"NOR-AID (Northrop In-Plant Charity) is the means whereby financial grants-in-aid may be made to assist in the procurement of food, clothing, shelter, and essential medical care to members of Northrop Aircraft, Inc., or their dependents or survivors, whenever such personnel have been stricken by injury, illness, or other mishap clearly beyond their control, and as a result thereof lack sufficient resources to provide such necessities for themselves. Dependents and survivors shall include only the husband, wife, and children.

"All NOR-AID grants are considered non-recoverable. The applicant cannot be committed to repay any monies granted from NOR-AID.

"All NOR-AID grants will be considered upon the basis of information furnished by the applicant or his representative upon the accepted NOR-AID application form, which form may be supplemented by such documentation as may be deemed necessary.

"To ensure that the personal dignity of the applicant will not be impaired, all communications, either oral or written, which serve to identify a Norcrafter with an application for a NOR-AID grant or with the receipt of a NOR-AID grant, will be considered "Northrop Private" information and must be treated as such by all concerned."

Norcrafters in circumstances of emergency when NOR-AID assistance would be in order should make first application at the Personnel Activities office at their facility. Regular forms carrying the official NOR-AID shield will be provided and, as stated in the foregoing, all particular and personal information will remain confidential.



OFFICIAL NOR-AID SEAL—. The shield signifies protection. The helping hand carrying the Northrop emblem signifies aid and assistance staunchly and willingly provided by all fellow Norcrafters. This seal and emblem will be used exclusively by NOR-AID.

NOR-AID PLANT COMMITTEES

HAWTHORNE—. NOR-AID business at Hawthorne facility will be executed by Hawthorne NOR-AID committee pictured, left: Scotty McKenzie, Industrial Relations manager, nights; Lillian Cowle, Missile Installation and Final Assembly, nights; Keith Thurston, general supervisor, Engineering Administrative Services; Chairman Ed Baum, executive assistant to director, Industrial Relations; George Forbes, paymaster; Jo Roth, women's counselor; Bert Osterberg, Factory Manager's office. Absent from pic is Larry Littrell, NOR-AID representative from El Segundo location. Mal Mountain, Personnel Activities, will administer program.

FLORIDA—. All Northrop facilities have own NOR-AID committees. Committee appointed to serve at Florida consists of, left: Chairman Jack Cushman, Florida Industrial Relations; Fred Hertel, Finance; William R. Mathews, Aircraft Flight Service; Friley B. Knight, jr., Instrumentation; James A. Thompson, Base Services. (See NOR-AID story on opposite page.)

ANAHEIM—. Applications for NOR-AID at Anaheim will receive careful attention of facility committee members pictured, left: Chairman Bill Aldrich, manager, Anaheim Industrial Relations; Vi Frazier, Final Assembly; Chuck Benson, general supervisor, Accounting; Gladys Alstad, Bill Carey, Production Fabrication.

LAX—. Norcrafter committee appointed to act upon NOR-AID requests at Los Angeles Airport facility includes, left: Kay Lacher, base administrator's office; Lynn Humphreys, Flight Service; C. J. Gilbert, base administrator (group chairman).

EDWARDS—. Ready to roll on Northrop-sponsored NOR-AID charity program at desert facility is NOR-AID appointed committee, above: Paul Nippert, Experimental Flight Test; Ralph Friesen, assistant base administrator; Chairman Bob Bradford, Edwards AFB Industrial Relations; Betty Niessen, base administrator's office; Charles Herrera, Flight Service. Committees will investigate requests, make recommendations.

ONTARIO—. Reading left to right, NOR-AID program committee members at Ontario facility are: George Flowers, Empennage Assembly and Installation; Eugene Buguley, Subassembly Control; Chairman Robert Snider, manager, Industrial Relations; Mildred Collins, Empennage Assembly and Installation; J. F. Wilson, supervisor, Accounting Coordination.

PALMDALE—. Facility Committee selected for Palmdale NOR-AID program includes, left, Mark Berry, Production Flight Service; L. W. Monger, supervisor, Finance; Chairman Dick Carroll, manager, Palmdale Industrial Relations; Robert Smith, Quality Control; Ruth Rice, Production Producibility. All committees coordinate with NOR-AID Administrator Mal Mountain.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)

VERMONT & ADAMS, Los Angeles. (Have room for 3 passengers from Vermont & Adams to plant 4 & 3.) ROBERT N. SAILER (5561-38319, Ext. 2518). RE 3-7658. 12-1

(Zone 3)

WESTERN AVE. & 104TH, Los Angeles (47). (Car pool considered.) J. R. LINDLEY (5411-17058, Ext. 1371). PL 6-7904. 12-3

(Zone 4)

DOWNEY AREA. (Will either ride or give ride from Downey or will pick up anyone along Imperial hiway). M. KRAVETS (5502-18009, Ext. 2741) TO 4-5554. 12-4

HOLT & CENTRAL, Ontario. (Leave about 5 a.m., via Brea Canyon and Imperial Hiway to Plant one. Will consider car pool.) J. K. DODSON (5583-22005, Ext. 2244). 12-4

ROSECRANS & VALLEY VIEW, LaMirada. (Travel Rosecrans or Imperial, prefer riders from La Mirada-Norwalk area—will consider others.) W. LA SELLE (5222-33242, Ext. 2504 or 1918). 12-4

(Zone 5)

DEL AMO & WOODRUFF, Lakewood 11. (Will pick up along route. Del Amo to Wilmington to Victoria or Artesia to Crenshaw. Room for 3 riders.) P. H. MAURER (5221-15210, Ext. 1856), TO 6-3349. 12-5

(Zone 8)

OLD SEPULVEDA AND REYNOLDS DR., Torrance. (Ride pool only—near Sepulveda Gardens, Victoria Terrace, Allied Gardens.) BILL ODOM (5236-30833, Ext. 1638 or 1963). FR 5-5996. 12-8

NORMANDIE & 228th, Torrance. (Room for 3 passengers. Drive Normandie to El Segundo.) C. L. FITZJARRELL (5507-14710, Ext. 526 or 624). FA 8-2433. 12-8

7:30 a.m. — 4:15 p.m.

(Zone 1)

WESTERN AT VENICE, Los Angeles 6. (Car pool considered.) EDGAR L. LAWRENCE (5910-40615, Ext. 2660). RE 2-9214. 13-1

(Zone 4)

FIRESTONE-LAKEWOOD BLVDS., Norwalk. (Desire car pool.) MARVIN STERN (3554-39768, Ext. 2062). TO 4-5576 13-4

(Zone 5)

SAN ANTONIO & ORANGE, Long Beach. (Car pool desired). JOAN AHERN (3473-34268, Ext. 2655), L. B. 40-7769. 13-5

(Zone 8)

WEYMOUTH & 7th, San Pedro. (Would like to form two or three man car pool or join one already formed.) GERRY GARTLAND (4110-31292, Ext. 2331). TE 2-9629. 13-8

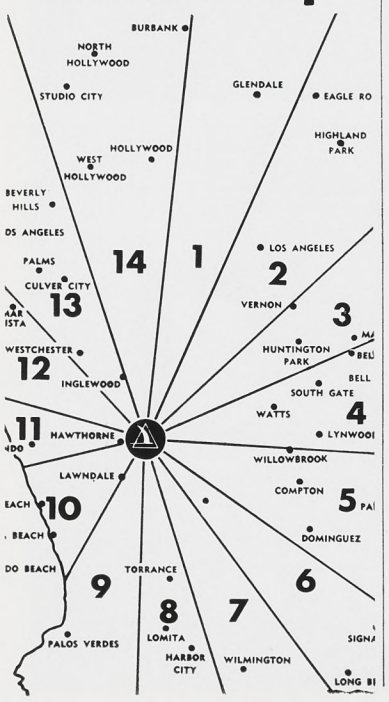
(Zone 10)

NORTH REDONDO BEACH AREA. (Will pick up in North Redondo Beach Area, on Redondo Beach Blvd., also Prairie Blvd., north of Redondo Beach Blvd to NAI). DAN CARY (5940-33277, Ext. 2661). FR 9-9573. 13-10

(Zone 13)

VENTURA BLVD-SEPULVEDA BLVD., Sherman Oaks. (Car pool desired.) H. M. STANFIELD (5960-38236, Ext. 1468). ST 9-3945. 13-13

Zone Map



RIDES OFFERED

3:45 p.m. — 12:15 a.m.

(Zone 14)

WEST BLVD. & W. 59th PL., Los Angeles. (Car pool considered). IONE B. BUCHER (4230-39764, Ext. 631), AX 4-1122. 16-14

4:45 p.m. — 1:15 a.m.

(Zone 1)

MELROSE & HOOVER, Hollywood. (Will pick up anyplace in Hollywood, route now is Melrose to La Brea, car pool considered.) M. H. RUSSELL (5583-40234, Ext. 2244). 18-1

BEVERLY BLVD. & WESTERN, Los Angeles. (Travel Western Ave.) MIKE GALLEGOS (5502-18067, Ext. 2741). NO 2-4233 18-1

(Zone 3)

MANCHESTER & BROADWAY, Los Angeles or Florence and Broadway. (Will pick up as far east as Central, far south as 116th). C. ZIMMERMAN, JR. (5503-34732. Ext. 2464). PL 18173. 18-3

CHAPMAN AND 9TH ST., Garden Grove. (Wish to share car pool.) REYNARD GIOVINAZZO (5508-19678, Ext. 2755). LE 9-6767. 18-3

(Zone 7)

NORMANDIE & CARSON, Torrance. (Will take any street to Torrance.) VITO MARINO (5587-37447, Ext. 1947). FA 8-7448 18-7

(Zone 9)

HAWTHORNE BLVD. & OLD SEPULVEDA ROAD, Torrance. (Can take two riders from vicinity of Hawthorne Blvd. and Old Sepulveda Road, Torrance, to Plant I area. Route: North on Hawthorne Blvd. to Broadway to Plant I.) R. A. REAMER (5231-15559, Ext. 1663). DA 6-4898. 18-9

(Zone 13)

SEPULVEDA & SHERMAN WAY, Van Nuys. (Riders wanted from Van Nuys, or en-route via Sepulveda, Sawtelle, Centinella, La Brea thru Inglewood, to Plant I) EMIL STRASSER (5524-20832, Ext. 2634). ST 6-1414. 18-13

(Zone 14)

FAIRFAX & BEVERLY BLVD., Los Angeles 36. (Will pick up on La Brea south of Beverly Blvd.) P. FRIZLER (5509-19953, Ext. 2075). WE 9-1578. 18-14

Miscellaneous (Split Shifts)

(Zone 1)

WESTERN & OLYMPIC, Los Angeles 19. (Hours: 7:30 a.m. to 6:15 p.m.). DON SCHUSTER (3332-33369, Ext. 661). RE 4-5330. 20-1

(Zone 8)

PALOS VERDES DRIVE NORTH & CRENSHAW BLVD., Rolling Hills. (Travel Crenshaw to Broadway, and Broadway to Plant I. Hours 7:45 a.m. to 4:30 p.m.). MARGE WALKER (5000-14187, Ext. 557), FR 7-1732. 10-8

Rides Wanted

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)

NORMANDIE & 3RD or 3rd & Western, Los Angeles. ROSE W. SHRAGO (5507-38963, Ext. 725). 2-1

(Zone 2)

WESTERN & CENTURY BLVD., Los Angeles 47. BARBARA CARTER (5222-15217, Ext. 1919). PL 6-3401. 2-2

CENTURY & VAN NESS, Los Angeles. GAYLE D. DAVIDSON (5621-40596, Ext. 2649). PL 5-0989. 2-2

(Zone 3)

MANCHESTER & MAIN, Los Angeles. STAN RATAJCZYK (5515-40323, Ext. 2696), PL 1-9181. 2-3

(Zone 4)

DOWNEY AREA. (Will either ride or give ride from Downey or will pick up anyone along Imperial Hyway). M. KRAVETS (5502-18009. Ext. 2741). TO 4-5554. 2-4

BROADWAY AND 105TH. LOREN R. SWANSON (5524-74, Ext. 7388). PL 5-4220. 2-4

FIRESTONE AND LONG BEACH BLVD., South Gate. (Will share in car-pool or accept a ride.) F. B. TENNANT (7310-40538, Ext. 2362). L.B. 208-026 (Sister's) 2-4

FERNWOOD & LONG BEACH BLVD., Lynwood. DORLA C. LEWIS (5501-40556, Ext. 2200). NE 8-4464. 2-4

(Zone 5)

CARSON & ORANGE, Long Beach 7. G. J. GRUMMER (5161-14909, Ext. 2071). L. B. 4-04370. 2-6

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 5)

OLIVE & SANTA FE, Compton. V. F. JANZEN (5524-20742. Ext. 2209), NE 2-9429. 2-5

OLIVE & LONG BEACH BLVD., Compton. BARBARA CRAIN (5406-40635, Ext. 2220) NE 2-4853. 2-5

(Zone 7)

REDONDO BEACH & RUTHELEN, Gardena. (Ruthelen is west of Western Ave.) E. C. PATTERSON (5515-23103, Ext. 2279, 1825). DA 9-1268. 2-7

(Zone 8)

WESTERN AND 223RD ST., Torrance. CHARLOTTE KUDLEMYER (5231-38648, Ext. 2766). FA 8-1014. 2-8

OLD SEPULVEDA AND REYNOLDS DR., Torrance. (Ride pool only—near Sepulveda Gardens, Victoria Terrace, Allied Gardens.) BILL ODOM (5236-30833, Ext. 1638 or 1963). FR 5-5996. 2-8

(Zone 9)

PRAIRIE AVENUE and 138TH ST., Hawthorne. JUNE SLATEN (5336-38423, Ext. 2684) OS 5-3048. 2-9

(Zone 10)

VAIL & MANHATTAN BEACH BLVD., No. Redondo. FRANK McGINLEY (5163-14564 Ext. 1821). FR 4-5396. 2-10

RAMONA & 134TH ST., Hawthorne. N. M. BLAND (5507-19288, Ext. 526). OS 6-2959. 2-10

RINDGE & REDONDO BEACH BLVD., Redondo Beach. (Between Rindge and Vail on Curtis Ave.) MARION WALTER (5509-16127, Ext. 1536). FR 4-2190. 2-10

(Zone 13)

VETERAN & WILSHIRE. B. C. BARTON (7210-26676, Ext. 2206). GR. 7-1539. 2-13

INGLEWOOD AVE & ARBOR VITAE, Inglewood. JAKE WEGELIN (5510-20007, Ext. 2255). OR 1-5276. 2-13

ARBOR VITAE & EUCALYPTUS, Inglewood. DELORIS BENSON (6457-35995, Ext. 1709). OR 7-9446. 2-13

(Zone 14)

YUKON & IMPERIAL HY., Inglewood. MARTIN C. EMERSON (5504-37440, Ext. 1503). 2-14

RIVERSIDE DRIVE & COLFAX AVE., No. Hollywood. W. L. EGGLESTON (5587-22892, Ext. 2750). 2-14

LA BREA & WASHINGTON, West Los Angeles. BRUNO H. PINKERT (5524-40631. Ext. 2209), WE 4-8974. 2-14

7:30 a.m. — 4:15 p.m.

(Zone 4)

EUCLID & SANTA ANA FREEWAY, Anaheim. WALTER D. CHANEY (3000-40466, Ext. 1293). 3-4

(Zone 5)

OLIVE & GARFIELD AVE., Paramount. TRUDY KAUFMAN (1421-40455, Ext. 2393). ME 0-2167. 3-5

(Zone 7)

WESTERN & 181st, Gardena. LAWRENCE A. BOHM (3540-40725, Ext. 567). 3-7

(Zone 10)

HIGHLAND & 27TH, Manhattan Beach. (4 riders wish rides, route from Hermosa via Highland, Rosecrans, Prairie. Singly or all together, please.) MILDRED REA (5339-16117. Ext. 1565). FR 9-9580. 3-10

HOLLYWOOD RIVIERA BCH. CLUB or Ave. I at Catalina Ave., Redondo Beach. (Could be at "Windjammer" Ave. I at Catalina. Ride urgently needed.) HELEN M. ROBINSON (9330-39191, Ext. 1471). 3-10

(Zone 11)

MARIPOSA & MARYLAND, El Segundo. ALICE M. SEIBERT (5339-15994, Ext. 2691). EA 2-0694. 3-11

IMPERIAL & ANZA, Hawthorne. VIVIAN EAVES (5930-19302, Ext. 755). OS 6-9897. 3-11

(Zone 13)

VENTURA BLVD.-SEPULVEDA BLVD., Sherman Oaks. (Car pool desired.) H. M. STANFIELD (5960-38236, Ext. 1468). ST 9-3945. 3-13

(Zone 14)

LA BREA & 4TH ST., Los Angeles (36). (Ride urgently needed.) MARK A. STERN (3464-30913, Ext. 2666-2188). WE 8-1833. 3-14

SANTA MONICA BLVD. & FAIRFAX, Los Angeles 46. (Car pool considered.) IRENE I. LAMM (3420-39997, Ext. 1815). HO 3-4588. 3-14

OLYMPIX & FAIRFAX or LA BREA & FAIRFAX, Los Angeles. (Olympic & Fairfax or Wilshire & Fairfax or La Brea & Olympic or Hauser & Pico.) ED J. CUMBEY (U.S.A.F., Ext. 1915). WE 3-4551. 3-14

(Zone 14)

REDONDO BLVD. & LONG, Inglewood. (West Blvd. & 68th St., ride home only.) SUE THURMOND (5355-39, Ext. 1575). AX 1-0483. 3-14

3:45 p.m. — 12:15 a.m.

(Zone 1)

DOUGLAS & SUNSET BLVD., Los Angeles FELIX M. SEGARRA (5520-39683, Ext. 1233). 6-1

(Zone 5)

EL SEGUNDO & WILLOWBROOK. Compton. LOUIS BATTLE (5503-36, Ext. 2681. NE 6-1068. 6-5

(Zone 9)

HAWTHORNE BLVD. & 163rd ST., Lawndale. JEAN F. BOWEN (7520-14242, Ext. 625). 6-9

BBSF CLASSIFIEDS

(Continued from Page 3)

FREE (To be given away)

ENGLISH IVY CUTTINGS, rooted. MARY-ELLEN DOWNS, FR 2-5222. D

CAT, solid black, male, house broken, about 6 months old. DAVE BARRETT. Write to Northrop News, Box 430. D

FOR SALE OR TRADE

MOTORCYCLE, 49-61 H.D., buddyseat, bags, Hydroglyde, best offer; MOTORCYCLE, 80 H.D., excellent running condition, new tires, sell or trade for pick up or panel truck. W. L. CAPPS, FR 4-6667. M

MERCURY, 1951 4-door, overdrive, $100 and take over payments of $50.24 per month, $602.88 balance, or trade for good transportation car. JAMES F. HALPAIN JR. Write to Northrop News, Box 427. M

HOUSE, small, fenced yard, 2-car garage Servel refrigerator, sprinkling system. Lawndale, terms, or will take modern house trailer as part payment. Write to Northrop News, Box 436. M

TRIPLEX, about 3 years old, one 2-bedroom and 2 one-bedroom apartments, disposals, garages, laundry-room. Will trade equity for home. Income $221.50 per month. VERNA MUIR, DA 4-0696. M

VENETIAN BLINDS. 3. 86" wide, 34" long, sell or trade for drapes; full size BOX SPRINGS AND MATTRESS, sell or trade for bunk beds. OR 4-3140. M

TRAILER, 1951, 35' Rollaway, 2 bedrooms and bath, $700 and take over payments of $75 or trade for equity in 3-bedroom home. VIRGINIA TURNER. Write to Northrop News, Box 417. M

RANGE, good O & M white enameled, full size, $27; TIRES AND TUBES, three, 600-16, $4 set; gas HEATER, circulator, 24" high, $4; CAMP BED, steel, double compact folding coil springs, $4, or will exchange for short wave fluorescent mineral light GEORGE FOX, PL 8-4651, after 5 p.m. M

HEARING AID Acousticon model A-180 vacuum tube type with carrying case and battery charger, like new, cost $228, $100 or trade for small transportation car or what have you? JAMES F. ANDERSON. Write to Northrop News, Box 414. M

DANDY DOLLY, like new, $50, or trade for Tour-Aid hitch. MILDRED MALONE. Write to Northrop News, Box 415. M

VANITY, dark brown; chrome DINETTE SET, red. Will sell or trade one or other for three-quarter bed complete. R. H. THOMAS. Write to Northrop News, Box 409. M

REVOLVER, Colt 38 W.C.F. cal., fired about 6 rounds; new cost $82.50; $45, or trade for good deer rifle. T. A. MICHAELS, OR 1-9955, after 4 p.m. M

GMW

RIDES WANTED

4:45 p.m. — 1:15 a.m.

(Zone 1)

VENICE & ARLINGTON, Los Angeles. ALEXANDER SMITH, JR. (5585-40101, Ext.

OLYMPIC & 18th, Santa Monica. TONY M. GARCIA (5524-40564. Ext. 2634). 8-12

YUKON & 111TH PLACE, or Doty & 111th. ALICE M. JOSLIN (5374-40390, Ext. 1885). OS 6-4231. 8-1

(Zone 4)

LONG BEACH & STATE, South Gate. MARY L. PEMBERTON (5507-19381, Ext. 526, 564). LO 7-6949. 8-4

(Zone 5)

ROSECRANS & BELLFLOWER BLVD., Bellflower. STANLEY J. RIPLEY (5503-38127, Ext. 2681). TO 6-5396. 8-5

(Zone 10)

RINDGE & REDONDO BEACH BLVD., No. Redondo Beach. (Ride needed to work only). VERA T. MATZKE (5355-37749, Ext. 1445). 8-10

(Zone 14)

ADAMS & HOWSER or JEFFERSON, Los Angeles 16. TROY MOODY (5621-39411, Ext. 2208). WE 5-4711. 8-14

(Miscellaneous—Split Shift)

(Zone 1)

WESTERN & MELROSE, Los Angeles (38). (Hours: 7:30 a.m.-6:15 p.m.) PAUL T. NELSON (3542-31094, Ext. 716). HO 9-6955. 10-1

(Zone 4)

LAKEWOOD & IMPERIAL BLVDS., Downey. (Hours: 4:15 p.m.-12:45 a.m.). SALLY EARL (5930-38460. Ext. 753), TO 9-3801. 10-4

SOUTH GATE AREA (Hours 4:15 p,m, to 12:45 a.m.) ELEANOR FOREMAN (5917-33631, Ext. 2541). LO 6-6396. 10-4

(Zone 9)

COMPTON & PRAIRIE, Hawthorne. (Hours: 4:15 p.m.-12:45 a.m.) Ride home only). B. WOOD (4220-40013, Ext. 1452), OS 5-4357. 10-9

(Zone 10)

PIER AVE. & LOMA DRIVE, Hermosa Beach. (Near Sepulveda, Mariposa. Hours 7:15 a.m. to 4:00 p.m.) JACKIE SHAY (6150-39469, Ext. 626, 625, 627). 10-10

FOR SALE OR TRADE

LINCOLN, 1947, 1948 Mercury engine, overdrive; Hi-Fi 2-way SPEAKER SYSTEM in cabinet; 1.5 h.p. G.E. 110/220 volt HEAVY DUTY MOTOR; RCA 40-watt POWER AMPLIFIER; chrome DINETTE SET; DAVENPORT & CHAIR suite. Will trade for motor-boat equipment or certain pieces of electronic test equipment, such as scope or combination tube-tester, VTVM. W. S. COOK, DA 6-2467. evenings or weekends. M

RENTALS OFFERED

BACHELOR APARTMENT, fireplace, all conveniences, completely furnished facilities for one only. North Inglewood, $15 per week. OR 7-5367. E

SHARE HOUSE, young man. Gardena, furnished, $40 month including telephone, TV, utilities. Prefer night shift worker. CLIFF SNUDDEN, DA 9-6400, between 11 a.m. and 4 p.m. E

APARTMENT, one bedroom, near Northrop, water paid, $50 per month. HELEN LILLYWHITE, FA 8-2323. E

ROOM, for one or two women, kitchen privileges. Hawthorne. OS 6-8945. E

SHARE HOME, newly furnished, $10 per week. LOUIS BATTLE, NE 6-1068. E

SHARE HOME, engineer, 27, will share 5-room furnished home, maid service, TV, cooking privileges, 10 min. to plant 1, $30 per month. OS 6-4008. E

BEDROOM, furnished, private bath and entrance, near Olympic and Western, quiet, can furnish transportation to Northrop, $35 mo. RE 4-5330. E

BOARD and ROOM, TV, lunches, good meals, private home, day men preferred, $18 week. MULLER, FR 4-4215. E

FURNISHED ROOMS, 5 blocks from Northrop, quiet, near Hawthorne bus. sec., $8 per week. OS 5-5850. E

HOUSE, 3 bedroom, large fenced yard, 5 miles from Northrop, children O.K., $87.50 month including water. OS 6-6074 after 4 p.m. E

APARTMENT, clean, furnished, single, 2 blocks to center of Hermosa, ½ block to beach, $40. D. R. BULL, FR 4-1152. E

BACHELOR APARTMENT, clean, furnished, near stores, ½ block from beach, Hermosa. $47.50 mo. D. R. BULL. FR 4-1152. E

APARTMENT, new 2-bedroom duplex, Prairie Ave., opposite Alondra Park, available Oct. 15. V. F. RILEY, FR 5-2780. E

HOUSE, small two-bedroom and single garage, $75 per month, 18th St. Manhattan Beach. V. BERTAGNA. PL 4-6974. E

APARTMENT, quiet front 1-bedroom, Thermo heat, garbage disposal, laundry facilities, $75. N. A. STANG, OR 7-2322.

HOUSE, unfurnished, 2-bedroom, hillside contemporary, covered patio, single garage, wall furnace, parquet flooring, view, 11 miles to plant I, available about 1 December. DALE H. HUSS, FR 5-1562. E

FURNISHED ROOM, 5 blocks from Northrop, clean, quiet, next to bath. $8 per week. OS 5-5850. E

ROOM, Private home, near bath, private entrance. reasonable. A. RICKERS, OS 6-1385, after 3:15 p.m. E

RENTALS WANTED

HOUSE or DUPLEX, close to Northrop, 2-bedroom, have baby 6 mos. old, $65 a month. SUE THURMOND, AX 1-0483. F

AIRPLANE for private flight instruction. WM. E. MEYER, DA 4-3720. F

CHILD CARE OFFERED

CHILD CARE, day nursery, ages 3 yrs. and up. Close to school, fenced yard. Balanced diet. Naps if desired, licensed. OS 6-6566. G

CHILD CARE, ages 3 to 10 yrs, near schools, fenced yard, hot lunches, snacks, naps, 1 mile from Northrop. Day or night shift. OS 5-7993. G

CHILD CARE, days, licensed home, 3 years and up, large fenced yard, close to school, references. NELSON V. THOMAS. TE 4-3689. G

CHILD CARE WANTED

CHILD CARE WANTED, day or night in my home or yours. J. E. FOLEY, DA 4-7814.

LOST

DECAL #104 to Lot "S", lost Monday 9-12-55. Return to Dept. 6002, Plant II, Zone 41. J

PERSONALS

GIRL PIANO PLAYER wanted, interested in Sat. night work, with all-girl group. Prefer someone on second shift, but not necessary. CAROLINE, FR 2-3321, days. L

STORAGE OFFERED. Will store piano, electric organ, or fine furniture for 1-2 years for use. RE 4-5330. L

RIDE OFFERED, leaving for Sacramento around midnight Nov. 6, returning 11th or 12th. Will accept 2 or 3 riders. DA 9-4929. E

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
Practice sessions, Gardena High School, every Wednesday evening at 6:45 p.m.

BIBLE STUDY, Roy Stahl
Meet daily, Plant I, east mezzanine conference room, 11:30 a.m.; Plant II, second floor, center conference room, 12:00 p.m.; Plant III, conference room, 11:00; Nash Building, 12:15.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Ralph Vincent

BOWLING (nights), Garland Steiner
Winter leagues now in progress.

BRIDGE CLUB, Walt Darby
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Robert Carberry
Meet every other Friday evening, 7:30 p.m. Next—Oct. 14.

CAMERA CLUB (nights), Gene Beck
Meet every other Saturday, 7:30 p.m. Next—Oct. 15.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF, Andy Titus
NRC Open Tournament, Baldwin Hills Country Club, October 9 and 16.

GUN CLUB (days), Dick Booth
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—Oct. 24.

MIXED CHORUS, Florence Graveline
Meet every Wednesday, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Bill Kappele
Meet 1st and 3rd Tuesday of each month at Annex, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Friday after work (1:30 a.m.)—Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—October 15.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING CLUB (nights), Tex Hylton
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays. Beginning class Sunday afternoons from 3:00 to 5:00 p.m.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins
Winter leagues now in progress.

DINNER CLUB, Hazel Stewart
Monthly dinner meetings.

INTERIOR DECORATION
Weekly meetings in lampshade making Thursdays, 7:30 p.m.

SENIOR GIRL SCOUT TROOP (Mariners), May Hawkins
Meet Tuesdays, 7 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Vi Murphy
Meet first, third Thursdays, 7:30 p.m.

SPORTS *The Northrop News*

Plant Softball Champions

PRIDE OF NORTHROP—. Pictured above is night shift Department 5620 softball team, which took all comers to win coveted NRC Plant Championship softball award. Kneeling, left: Don Hester, Eddie Melindy, Lee Honea. Back, left: Dave Carney, night shift Softball comish; Charles George, team manager; Art Ward, Bill Montgomery, Monte Gmur, Orv Brewer, Lynn Moore. Not in pic were team members Tom Strawn, Dick North, John Kedjeski, Al Badish, Tom Duddleston, Don Curran. The Missile Subassembly and Major Structure boys took title from Department 5300, 1954 champs, after winning the night title from 5437.

Annual Art Show Open For Entries

The ninth annual NRC Art Club prize exhibit has been scheduled. Deadline for work to be delivered to Personnel Activities offices, Plants I and III—or at any of the outlying facilities—has been set for November 18. Exhibits will hang at Plant III Cafeteria from November 21 to December 2, and at Plant I Cafeteria from December 5 to December 16.

As in the past, the exhibit is open to all Norcrafters and their immediate families (husband, wife, dependent sons or daughters).

This year special emphasis will also be placed on the Junior Division exhibit. The younger set division includes all Norcrafter sons and daughters age 14 years and under.

All works entered must be for competition.

Three pictures will be chosen for the purchase prize awards by a jury of professional artists. The first prize picture will be purchased for $100, second place, $75, and third place, $50. In addition the jury will award seven honorable mention prizes to be furnished by the NRC.

A special Sweepstakes award will also be made to the artist whose picture is chosen by popular vote of Norcrafters during the exhibit.

The same jury will judge the Junior Division exhibits, and first, second, third and two monorable mention winners will receive ribbon awards. In addition, the first place winner will receive an award of art supplies in the medium of his or her choice.

Art exhibit rules will be published in a later issue of the Northrop News or may be obtained at Personnel Activities offices, all plants and facilities.

Night Shift Softballers Take Plant Championship

One of the toughest battles in NRC activity tourneys is the one waged for the Softball Plant Championship title.

This year's title was taken by the night shift Department 5620 team. The Missile Subassembly and Major Structure boys have been runners-up for several years, but this year they cracked through to win over Department 5437 in a two-out-of-three series and went on to win two straight over the defending champs, day shift Department 5300.

Much of the credit for the 5620 win was given to inspired playing by all members, and the steady pitching of Lee Honea, while special congratulations went to Charley George for a fine job of managing. The homer Don Hester hit in the play-offs didn't hurt a bit, either.

Needless to say, the night shift boys are pretty happy. This is the first time in years that a night shift team has taken the title from days, although the after-dark boys have always been stiff competition and only lost the championship last year by a 2-1 margin.

LAX Trophy Takers

LA AIRPORT CHAMPS—. Recent table tennis and badminton tourneys at LAX netted championship awards for NRC members pictured. Assistant Base Administrator Jim Byrd, center, presented NRC trophies to, left: W. C. "Bing" Tully and Benny Del Mastro, badminton doubles champs, and to Larry O'Brien and Victor Moore, table tennis doubles winners. Larry also took table tennis singles championship. Benny Del Mastro is newly-appointed NRC representative at the International Airport facility.

NRC Chorus Plans Early Christmas

By HAL HUNSBERGER
President
Northrop Recreation Club

Only 74 more days until Christmas! And some of the nicest Christmas presents of all—music and entertainment—are again being planned for distribution by the NRC Mixed Chorus to hospitals and orphanages throughout the Los Angeles area.

Mixed Chorus Commissioner Florence Graveline invites all Norcrafters to join them for "your own singing enjoyment as well as for the feeling of satisfaction derived from the expression of joy and happiness radiating from the faces of the youngsters who make up our audiences".

The Chorus is also scheduled to present a musical variety show for the Pennsylvania State Society on October 21. The group has received an invitation from the Los Angeles Bureau of Music to participate in a Business and Industrial chorus festival to be held in February, 1956.

Looks like a busy time ahead for the Chorus. Anyone for singing?

* * *

The newly-formed NRC Chess club is anxious to increase its membership not only with advanced chess players but also with intermediate and beginning players. New Chess comish Leonard Smith is now formulating a chess tournament which is designed to improve and instruct as well as entertain the chess player. The tourney will place the beginner on the same footing as the advanced player. Future plans include development of a chess team to challenge other aircraft company teams. Meetings are the third Wednesday of each month at 7:00 p.m. in the NRC Clubhouse. The next meeting is October 19.

ANAHEIM SENDS INVITATION TO BIG FALL DANCE

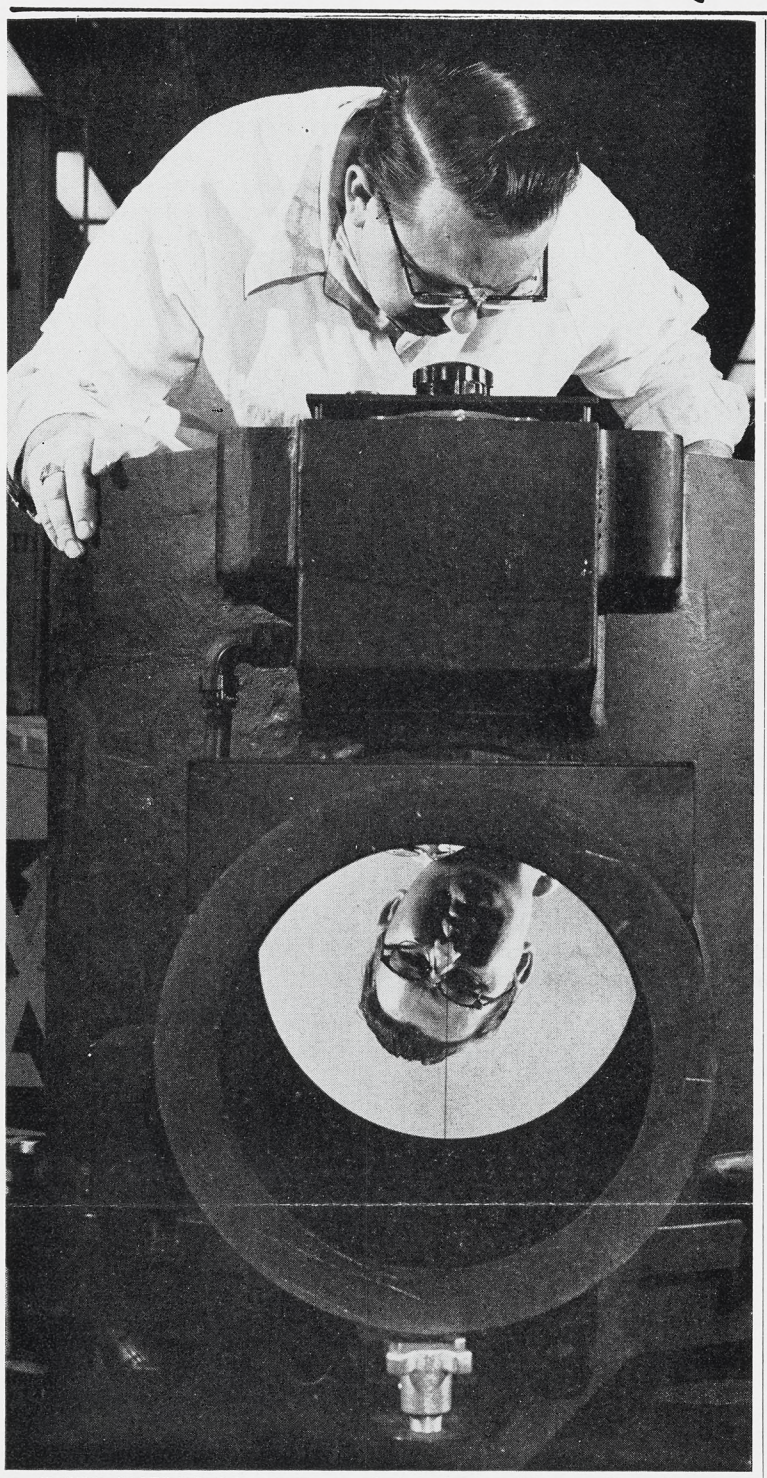
Anaheim Division invites Norcrafters of all facilities to its biggest Fall affair—a Halloween dance coupled with a tour of Anaheim's highly diversified plant—to be held Saturday, October 22.

Songstress Roberta Linn, with Orrin Tucker and orchestra, will put on the show beginning at 9:00 p.m. at the Rendezvous Ballroom in Balboa. Ducats—$2.00 per dancer.

Special feature of invitation—Norcrafters from other facilities, and friends, will be shown through the Anaheim Division plant from 5:00 until 6:00 p.m. the same day. Saturday shift will be at work. Plant location—500 East Orangethorpe Avenue, Anaheim. Park in front area, enter via main lobby.

Visitors are invited to relax, change clothes for dance at nearby NRC - Anaheim Clubhouse, 1625 South Spadra Road. From there Balboa and Rendezvous Ballroom is a 20-minute drive.

THE Northrop Scene BY DAY AND NIGHT

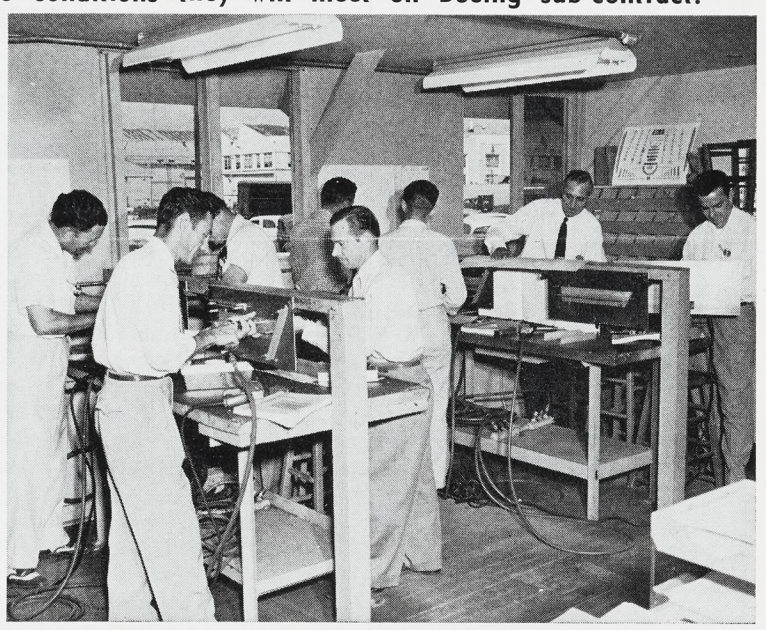


DEEP WELL? No—view of Anaheim Norcrafter Paul Shannon as he checks mirror in assembly of Northrop Sky Screen. Latter is display plotting board designed to screen out, speed up radar data. (Story, Page 1).

Practical Classroom Instruction

NORCRAFTERS of various departments have been taking intensive training under Industrial Training instructors in assembly and sealing of integral fuel tanks. Class shown, front: W. Z. Smith, USAF; Harry Belcher, instructor; P. S. Osborne, Tool Liaison; N. T. Kelley, Tool Planning; D. M. Wylie and Francis Marra, Production Planning; Ray Staley and I. R. Navarrette, Paint and Process; C. C. Stull, Process Control; K. B. Partch, Rocket Pod Assembly; E. O. Morgan, Sub-assembly; Leon Shadowens, Sub-assembly; and E. E. Packard, instructor. Front: R. L. Brown, Paint and Process; Doris Nizzi, Production Planning; W. A. Whaley, Final Assembly Inspection; George Nosacka, Quality Control. Class prepares Norcrafters for some of the conditions they will meet on Boeing sub-contract.

CLASS works at installation of Fluid-tight fasteners, getting practical application to top lectures and demonstrations. Conditions simulate those to be found in shop. Course includes 20 hours in assembly (taught by Belcher) and 28 hours in sealing (Packard teaches).



F-89s Over Southland

SOUTHLAND is far below as Scorpions in formation bank simultaneously on flight out of Palmdale. Aerial photo by Paul Wheeler, Photo Lab, from chase plane (Pilot—Whitey Van Salter). Rol Owen, Rod Close, Jim Bugbee flew F-89s.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, October 26, 1955

PRODUCTION SKILLS TRAINING PROGRAM

Special Management Club Meeting for Youngsters

Northrop Management Club dads and sons, dads and daughters, will converge on the Rodger Young Auditorium Saturday night, November 12, it has been announced by MC President Scotty Smith.

There will be a banquet dinner, prizes, a speech by a top test pilot, an atom act, and a be-bop session, plus loads of good fellowship.

The occasion is the first annual special night out for the Management Club younger generation. There won't be an age limit at either end. Northrop Management Club dads will use their own judgment on whether junior or junioress is too old or too young to attend.

Here's what will happen—The special night will get under way at 4 p.m., when the young folks and their dads will meet at the auditorium for cokes or Shirley Temple cocktails, plus conversation and informal meetings with each other.

Next will come dinner—the usual banquet fare (could be prime rib, steak, chicken, depending on the decision of MC facilities chairman Robbie Robinson). No matter what, it will be served in generous quantities, in the traditional Kal Loeb—Rodger Young style.

Then come the prizes — a selected award to the dad bringing the most family, and another for the kids.

There will no doubt be a comedy show, "Up and Atom", on hand for all age groups.

Then teenagers and grownups will get their supersonic jet airplane talk. Jet pilot Jack Farley, Northrop's chief of Production Flight Test, headquarters at Palmdale, will come down with his three oldest (Jack has five youngsters) and tell about flying Scorpions; war-time flying; what a test pilot has to do; and how it feels to exceed the speed of sound. He will also demonstrate "G" suits and other high-flying equipment.

After the formal part of the program, the teenagers will dance to juke-box music in a room reserved for them alone. This means that daughters as well as sons should come on out.

A movie is also in the jigs—Northrop's own, compiled by Bill Cox, Public Relations, from TV shorts which have had nation-wide viewings

Tickets and reservations will soon go out. If Management Club members want early information—call Ralph Hopkins, Public Relations, station 1801, who is program chairman. For ticket information—call Elise Williams, Northrop Hospital—station 631, ticket chairman.

New Look, New Buffet In Plant One Cafeteria

Newly-modernized and redecorated dining quarters, and waitresses smartly clad in becomingly crisp new uniforms greeted Norcrafters at the Plant One Cafeteria last week.

And the diners found, in addition to stylistic new furniture and draperies, that a new serving line had been added for their convenience.

The new "Buck-fet line" (pronounced 'buck-fay') offers a "buffet for a buck", Cafeteria Manager Freddie Wolfe states, and incorporates popular foods for the dollar price. It has already gained high favor.

Addition of the new draperies and an enclosure around the dish-washing area have combined to decrease noise level to a minimum. New chairs and soft

(Continued on Page 2)

Free X-Ray Exam Slate Announced

Free X-rays for chest examination of tuberculosis and other conditions are scheduled by Los Angeles County for the Centinela area during the next three weeks.

Examination and reports are free and confidential.

Ages—15 years and over. Age groups 15 to 18 should be accompanied by parents.

Locations and time:

Main and Grand, El Segundo
Oct. 27—1:30 to 7 p.m.
Oct. 28—9:30 a.m. to 3:30.

Cabinet shop — 134th and Inglewood Avenue—
Oct. 31—1:30 to 7 p.m.
Nov. 1—9 a.m. to 3:30.

Hawthorne City Hall
Nov. 2—10 a.m. to 3:30.
Nov. 3—12:30 to 7 p.m.
Nov. 4—9 a.m. to 3:30.

Sheriff's office, Lennox—
Nov. 7—1:30 to 7 p.m.
Nov. 8—9 a.m. to 3:30.

Market — 3506 West Rosecrans, Lawndale—
Nov. 9—9:30 a.m. to 3:30.
Nov. 10—12:30 to 7 p.m.

Market—134th and Budlong, Moneta—
Nov. 14—1 to 7 p.m.
Nov. 15—9 a.m. to 3:30.

KNOW-HOW FOR MACHINE OPERATOR

A carefully detailed, thorough training program is succeeding in turning out machine operators with typical Norcrafter know-how.

There are no special areas, materials, or machines set aside for training the new young Norcrafters—as they learn, they work on production parts to high quality standards demanded of production units here.

The trainees in the Machine Shop-Industrial Training program are, for the large part, high school graduates or young men recently returned from the armed services and just embarking upon their machinist careers.

They are carefully screened in Personnel, and further screened by Machine Shop supervision. The combination assures training of high type youths with aptitude and with the desire to learn the trade.

The net result, one Machine Shop supervisor has stated, is that a higher proportion "stay with it" than in any other shop in the area.

The training course runs for four weeks, or 160 hours, with practical training supplementing theory. Trainees work five hours per day on machines, and go to Industrial Training classes for three. The latter sessions are held in the afternoon in order to teach simultaneously both day and night shift personnel.

Training records are kept on each trainee, both in Industrial Training and in the shop. A record of the Industrial Training grades is forwarded to the shop and is used to help evaluate each trainee. Asking of questions is encouraged — and emphasized. Check sheets are furnished each shop instructor to allow him to check progress in teaching.

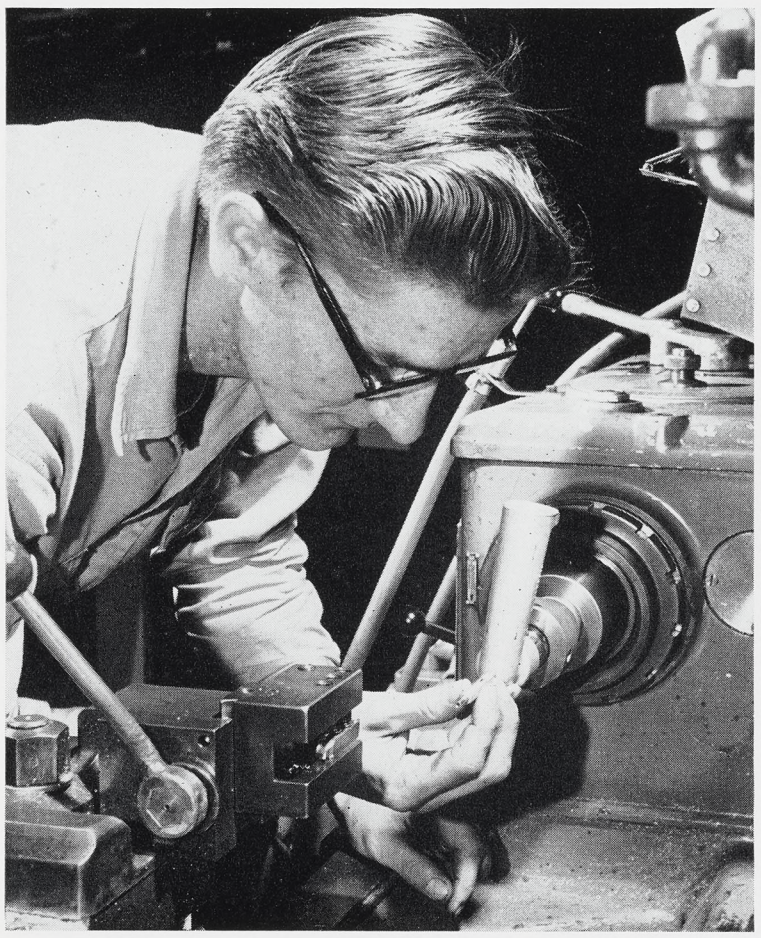
The check sheets include many subjects necessary to the continuation of high Northrop standards in safety, housekeeping, conservation, and quality of product, to mention a few ("... quality is the first concern of the machinist," a part of the course outline states).

The program thus far has been used mainly on drill presses, milling machines, and lathes, but is adaptable to other types of equipment . . . And the progress of the individual to higher classifications and more complex jobs depends only upon his aptitudes and abilities when he completes the program . . .

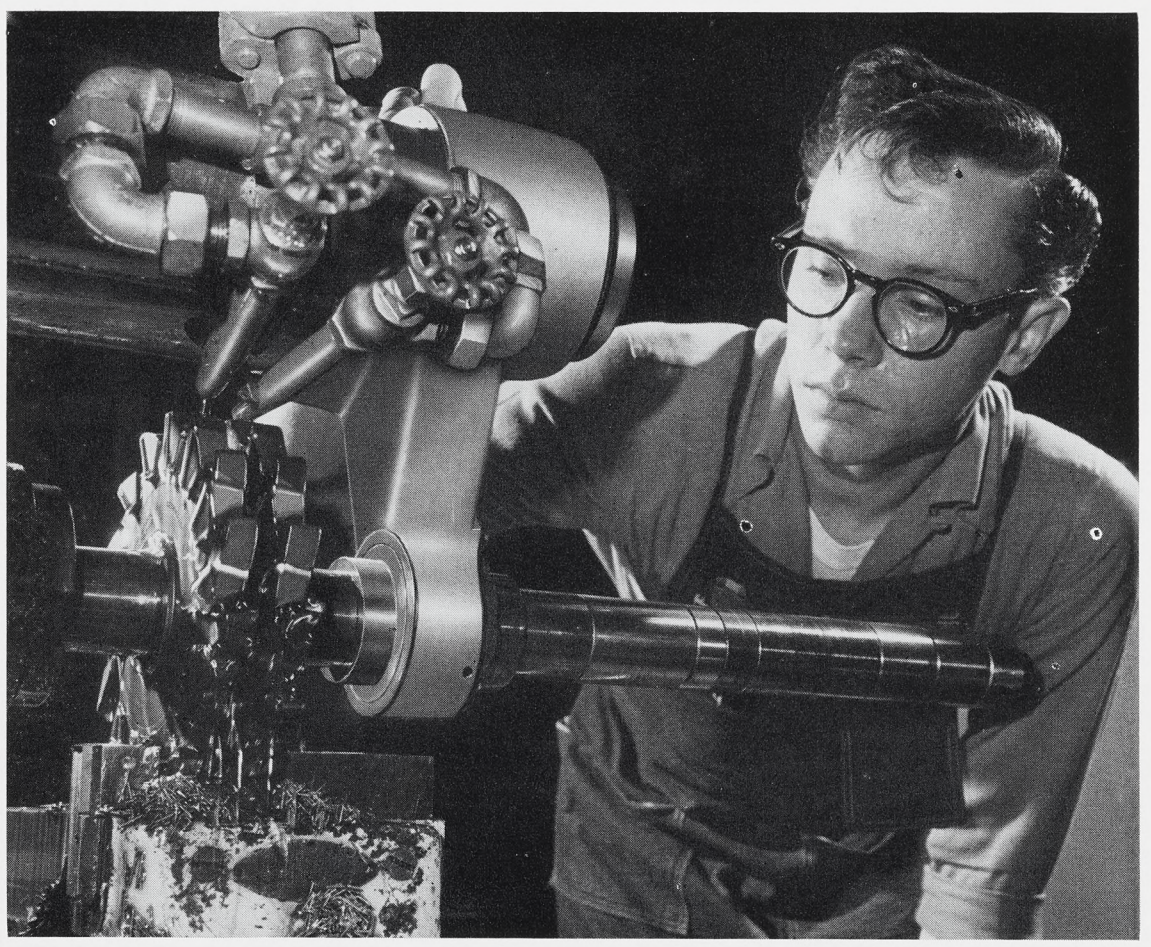
There are textbooks, prepared by Industrial Training and edited by shop personnel, which go hand in hand with the instruction of skills by experienced Machine Shop Norcrafters.

The books are comprehensive in detail, showing—with graphic illustrations—how to set up various jobs, how to use tools, how

(Continued on Page 4)



RECENT "GRADUATE" of machine operator training program, being conducted by Machine Shop and Industrial Training, is engine lathe operator Freddie Berkman, shown applying techniques he has learned.



MILLING MACHINE operator Charles H. Langdon started his Northrop career on burr bench, went into training program in mid-July. A Los Angeles native, Langdon came here following stint in Army. He is on day shift, goes to El Camino nights to study engineering. Program of training is proceeding well (see story).

Palmdale Section

Quality Assurance Plan Demonstrated to Miller

R. R. "Bob" Miller, vice-president, Administration, accompanied by Bob Catlin and Jack Mannion, director and assistant director of Northrop Quality Control, were the special guests recently of John Martin, chief inspector, and the entire Palmdale Quality Control organization.

The day's visit offered Miller and Quality Control Norcrafters an opportunity to get to know one another personally, as well as to review in detail the major innovations offered by Palmdale's "Quality Assurance" program. The latter is a joint effort of Quality Control and Manufacturing supervision which guarantees a high quality article while at the same time realizing impressive savings per Scorpion built.

Northrop Quality Control's philosophy of integrating the "quality effort" into the Manufacturing organization has attracted increasing industry interest due to the fact that both Quality Control and Manufacturing costs have been effectively reduced through this cooperative effort.

Following the Quality Assurance presentation, Palmdale Quality Control personnel took the vice-president and Hawthorne's Quality Control heads on a brief tour of the facility's operations to provide an on-the-spot demonstration of the program.

The day's visit was concluded by a friendly get-together and dinner at the Antelope Valley Dude Ranch.

Palmdale Quality Control men participating or represented during the day—John Martin, chief inspector; Dennys Pointon, assistant chief inspector; R. C. Smith, department assistant; Dick Branscum; Norm Hearne; Bob Hutton; "Marv" Schneider; Joe Smith; Warren Symington; Ernie Underwood; John Wells; Dick Young; Ed Zimmerman; Dick Dougherty; Harold Mead; Sam Kerst; M. C. Hancock; Bob Fisher and Dan Lund. Joining the QC folk—Jack Farley, chief of Production Flight Test; and Dick Carroll, Palmdale Industrial Relations head.

Triple Play Halloween Slated for Norcrafters

Palmdale NRC is slating a lineup of three shindigs for celebration of Halloween by all age groups.

All festivities will be held—or at least initiated— in Northrop-Palmdale's new NRC Clubhouse. Each affair will be costume, with prizes awarded for best costumes.

Thursday, October 27, will see an expected 1800 Junior Norcrafters and parents out for "Trick or Treat" party. Kids will munch on doughnuts with hot chocolate; parade their costumes for judging (eight prizes, altogether, in four age groups); watch cartoon movies.

As children leave Clubhouse, they will each be handed a Junior Norcrafter Trick or Treat Bag with candy and an apple already in for a starter. Then, on the night of the coming Saturday, the small-model spooks with trick or treat bags will descend upon Antelope Valley citizenry and environs in the true spirit of a traditional Halloween.

Palmdale's popular Teen-ager Club of some 250 will have a party on Friday night at the Clubhouse. Costumes and prizes again.

Finally, on Saturday — while the juniors are out on the town —Palmdale Management Club will have a costume ball and smorgasbord, also in Halloween spirit.

MARSHALL McCAIN NEW NRC VEEP; STEPS INTO OFFICE NOVEMBER 19

Marshall McCain will be the new NRC vice-president for Palmdale, and accepts the gavel from outgoing top man, Mark Berry, effective November 19.

"But there will be no shortage of NRC duties for Berry," remarks Sam Ponton, Palmdale's Mr. Personnel Activities and Services. "Mark's job has been tops, and we need him!"

McCain transferred to Palmdale when that facility was staffed in early 1954. He is assistant supervisor, Manufacturing Control.

The future veep will go into his office with plenty of backlog in the recreation experience department. Marshall has been amateur boxer in the Navy; pro baseballer in Texas; team manager of baseball's Junior League all-stars, as well as softball commissioner at Palmdale.

McCain is a Texan with a reputation among Norcrafters for a wonderful sense of humor.

New Look

(Continued from Page 1)

pastel colors serve to make a dining area of pleasing atmosphere.

The new uniforms of Cafeteria waitresses have added a bright touch of color to the quarters, Norcrafters report. The new garb is predominantly sunny yellow, with cinnamon brown and white trim. Matching caps bear the Northrop emblem.

The alterations were originally announced by Vice-president Robert R. Miller, Administration, in August. The operation was under the direction of the Corporate Planning department, Industrial Engineering and PA & S Administration. Creative elements of the program were formulated by Charles Boyle. Ed "Whitey" Cheswick, Area Engineering, arranged the details.

Crisp—Clean—New

DAY SHIFT Cafeteria Norcrafters reflected pride in new uniforms when they posed for this "family" group pic. Seated: Lillian Jeffers, Eunice Bittner, Gladys Silva, Vera Palmer, Mary Erwin, Amy Westwood, Eva Donald, Rosie Brown, Lou Price. Standing: Gwen Schmidt, Jean Gard, Minnie Sellentin, Myrtle Jackson, Marie Joos, Helen Bonin, Mildred Holley, Ethel Watson, Vi Murphy, Carmen Hopkins, Hedy Nistle, Margaret Mink, Minnie Sterr, Lois Button, Noreen Applegate, Jenny Hardy, Barbara Struhs, Ramath Dipboye, Eva Halvorsen, Edith Campbell, Doris Johnson, Della Johnson, Ida Gray, and Sally Rothermel. Crisp new outfits are of sunny yellow and cinnamon brown; matching caps bear Northrop emblem.

NIGHT SHIFT Cafeteria ladies are also resplendent in new working attire, as group portrait shows. Seated, from left: Lorraine Huber, Lucille King, Bernie Satterlee, Lois Hampton, Melva McBride. Standing: Myrtle Watson, Ruth McAbee, Ethel Galloway, Kay Kabey, Anna Sanzaro, Betty Youngblood, Ethel Spring, Bonnie Means. (See story, beginning on page one.)

"BUCK-FET"—. Buffet for a dollar is feature of new line in Plant One Cafeteria. Line is shown with Manager Freddie Wolfe standing before it with Norcrafters Eunice Bittner and Margaret Mink. New decorations, furniture, draperies, plus spanking new dress on Cafeteria personnel have elicited highly favorable comment from Norcrafters. One, at least, has asked permission to bring his family to dine some evening in near future.

Northrop News

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JOHN B. CLARK, Director

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HARRY HERRANEN, Assistant Editor (Nights)

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News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — Wednesday noon one week before issue date.

FOR SALE

MOTORCYCLE, 1950 BSA, 650 cc, Golden Flash, $300; 16′ plywood FISHING BOAT, trailer, $100; BABY SWING-CAR SEAT combination, stand, $3; BUGGY-CAR BED combination, large enough for 2-year old child, cost $50, $25. BRASIE T. CASTRO, PL 3-9935. A

GAS RANGE, 4-burner; REFRIGERATOR, '49 Kelvinator. Both excellent condition, $50 each. OR 2-8365, days. A

PLYMOUTH, '39 coupe, '46 motor, $75. MERTON E. WINTERS. Write to Northrop News, Box 512. A

BABY CAR BED, like new, with pad, $2. ARMIN LIEBICH, PL 2-9597. A

MOTOR BLOCK, 1946 Mercury, Iskenderian ¾ race cam, rods, bearings, aluminum race pistons, bore job, $60. DON GOODWIN, TE 5-4657, after 3:30. A

TV, mahogany console cabinet 16", excellent condition, reasonable. M. T. NORTHRUP. AX 2-1793. A

MATTRESS & BOX SPRING, double, fair condition. $5. BERT ST. GEAN, GR 2-2346. A

REFRIGERATOR, Hotpoint, 8.5′. $70; Royal VACUUM, upright model, all attachments; with hand vacuum, $30; Kitchen-Aid MIXER, all attachments, $65, original cost, $150; Dormeyer DEEP FAT FRYER. $15: all excellent condition. SARAH F. GRANT. EA 2-0076. A

BUICK, 1940 4-dr sedan, Special, make offer. FR 9-7342. A

ELECTRIC SHAVER, Remington "60" DeLuxe, 3 heads, $15. "GENTLEMAN" JIM CELONI, RE 1-4496. A

ARC WELDER, 200 ampere, Craftsman, cost $228, $175 cash. R. T. McCRUM, OS 6-4474. A

BICYCLE, girl's 24", carrier basket, blue and white, $15; HUDSON Pacemaker, 1950 club coupe; will sell for $300 November 5, 1955. V. C. HARDEN, OR 7-6533. A

DODGE TRUCK, ½-ton pick-up, 1951, $150 will handle. $500. MELVIN GARNER, OR 2-8858. A

PONTIAC CONVERTIBLE, 1949, $395; '49 NASH 4-door, $150. E. J. McGOVERN, OS 5-7414. A

MERCURY, '50, $650. BARBARA PETTIT, DA 9-1592. A

MODEL A, 1930, coupe. JIM HOVEY, FR 9-2135. A

PLYMOUTH, 1950 Suburban station wagon, $695. RICHARD L. CAHILL, DA 9-3436. A

MOTORCYCLE, 1937 Harley Davidson, two extra frames, gear boxes, $150. EDDIE CAPELA. Write to Northrop News, Box 510. A

HOUSE, 3-bedroom, 6 closets, 2 car detached garage, near Crenshaw-Compton shopping center and El Camino, $11,900, $1900 down. OS 5-3215. A

BOWLING EQUIPMENT, $25 value, like new, size 5½ maroon bowling shoes, steel shank, Junior Ebonite ball, zippered carrying case, all for $12. KAY TOUGAU, FR 2-1005. A

IRON, Betty Crocker, dial heat control, excellent condition. $6. MARTHA HAWKSHAW, AX 2-9074. A

WASHING MACHINE, Easy Spindrier, runs good, make offer. MOSES GOMES, OS 5-5362. A

FORD, 1950 2-door, overdrive, $375 spent on engine, transmission, steering, recently, $400 cash. A. L. GOSAGE, WE 9-8775. A

OLDSMOBILE, 1952 98. WALTER COX. Write to Northrop News, Box 509. A

FORD MOTOR, 1949, complete, also overdrive, rear end, radio, etc., reasonable. FR 2-7722, after 5:00 p.m. A

PRACTICE PIANO, good, with bench, Fairbanks upright model, $50. OS 6-3682. A

RING SET, engagement and wedding, original cost, $250, $80, white gold, diamonds, rubies. EXbrook 6-3151, Ext. 405 anytime, leave message. A

RUG, Chinese, sculptured. Red background, floral pattern, like new, $450; SHOTGUN, Belgian Centaur double barrel 12 Ga., perfect condition, extras, $90. M. K. GOUKER, OR 7-6941. A

DINETTE SET, chrome, extension leaf 36" x 58", oval gray formica top, and four green chairs, $90 new, $45. LEONA B. KAPPOLD, DA 9-3139. A

REFRIGERATOR, General Electric and GAS STOVE. Both pieces in excellent condition, $140. JOYCE EBY, DA 9-7176.

WILLYS STATION WAGON, 1953, 6 cylinder, F head engine, overdrive. D. WESTFALL, FR 5-8314. A

FORD CONVERTIBLE, '49 custom work on body, new clutch, transmission, $400 GARY STURM, OS 6-8484. A

CHEVROLET, 1953 Bel Air convertible, $1400. DONALD C. BERGH, LE 9-9276.

OLDSMOBILE, 1950 4-door, $650. C. ST. CLAIR, OS 5-5055. A

PICNIC TABLE, BENCHES, two extra patio CHAIRS, $10, Western-Holly GAS RANGE, $75. MARGARET BORTNER, PL 5-4759. A

TRAILER, 2-wheel, 6′ metal box, strong under gear, 6x16 wire wheels, $40. JACK A. DEATS, FR 4-7279. A

FOR SALE

COWBOY BOOTS, men's fancy, size 7½, $10; ladies COWBOY BOOTS, fancy, size 7, $10; Hardrock Eastern maple DINING TABLE, Salem finish, $50; ROLLER SKATES, pr white, Chicago, size 5, wooden wheels, $15; JAGUAR coupe, '52 model. OS 6-3173. A

RUG, 9x12 American Oriental, like new, $40. W. KUNZ, PL 5-3841. A

DRAFTING MACHINE, K & E, 30" and 24", like new, used 3 months. PL 2-9597. A

GUNS, .22 Winchester pump, case, $30; 12 ga. Browning auto, case, ammo, $70; 30-30 Winchester, case, ammo., $50; all guns in excellent condition. Write to Northrop News, Box 508. A

TOY POMERANIAN, black male, 4 mo. old, A.K.C. registered, $60. OS 6-6577.

REFRIGERATOR, 8′ G.E., $25. EDYTHE M. CAMPBELL. Write to Northrop News, Box 507. A

DINETTE SET, custom made padding, will seat 12 persons when opened, $35. BEDROOM SET, 4 piece walnut finish, full size, Beauty Rest mattress, box springs, $125; DINETTE SET, polished ash top, chrome legs, 4 chairs, $50. KAREKIN KALUNIAN, PL 3-6461. A

ELECTRIC RANGE, 2½ years old, Westinghouse, fully automatic, 2 ovens; 2 almost new 15x7.00 TIRES, 1 safety tube, reasonable. GEO. J. DRIVER, OS 5-3901. A

BOAT ANCHOR, Northill model 6R; 100 feet MANILA ROPE and chain, used once. TO 7-8270. A

COCKER SPANIEL, black, male, pedigree, 1 year old, good with children, offer. CHARLES M. ROBIDART, OS 5-3217. A

CLOTHES LINE POLES, pair, used, steel, painted, excellent condition, $3. J. D. WILLSON, GR 2-6621. A

MOTORCYCLE, 1954 NSU, max. 250 cc, overhead cam, $395. WILLIAM J. BERTUSH, OR 5-6088. A

DINNER SET, Noritake 90-pc., service for 12; also CRYSTAL. WE 6-6880. A

BOAT, 16′ outboard cabin, glassed, 40 h.p. Mercury elec. motor, trailer, good condition, $950. C. W. PETERS. Write to Northrop News, Box 506. A

DIVAN AND CHAIR, matching; five pair green DRAW DRAPES. PL 7-1922. A

WASHER, Thor, wringer-type with pump, good condition, $15. ROBERT SCHENK, PL 4-8881. A

END TABLES, 2 mahogany, step with casters, $20 each; mahogany SECRETARY, Winthrop, $75; Chrome DINETTE SET, oak-like Formica top, chartreuse chairs, $35, extension table. PAULINE BRODERICK, NE 1-9435. A

PIANO, console, French Provincial 1 yr old, $695 or make offer. EX 5-5242. A

LAND, 9½ level acres, 6 miles from downtown Ventura, 655′ fronting on Hwy. 399, unrestricted, improved, 4500 gal. septic tank, 10′ well, 500 gal. pressure tank, 18′x18′ building, $7500 handles. BYRON L. HANNA, PL 5-6910, after 5 p.m. A

GUN BOX for 4 guns, like new SCOPE Brandon 20-22 power and mount for box. Scope mounted in box, $65. STANLEY S. YELLIN, TE 3-3826. A

ELECTRIC GUITAR AND AMPLIFIER, new cost $130, $50; MANIFOLD, dual carburetors, with connections, $15; 1940 FORD, 2-dr sedan, needs rings, best offer over $50. C. E. KIRKPATRICK, JR. Write to Northrop News, Box 502. A

HOUSE TRAILER, all aluminum, 14′ Curtis-Wright, sleeps 4, side awnings, $425. MARTIN MILLER, OR 7-1201. A

LAND, near Escondido, 20 acres, view of mountains and freeway #395. 100 young avocado trees, sprinklers, well water and in water district. $1,000 per acre, might divide, terms. DAVID L. HICKS, JR. Write to Northrop News, Box 501. A

FORD, model "A", sedan. OR 2-3253. A

CHEVROLET, 1952 2-door, $875. ARTHUR FERNANDEZ. AN 3-7620. A

FORD, 1950 V-8 custom 2-door, overdrive, $495. G. F. EGAN, PL 3-9787. A

BOOKCASES, mahogany, matched pair, adjustable shelves; DINING SET, Duncan Phyfe, drop leaf table, pads, credenza, 4 chairs; SOFA and matching CHAIR, rose frieze; DESK, walnut kidney, glass top. E. W. BURTON, PL 5-4258. A

HOUSE, 3-bedroom, corner, across street from school, fenced yard, 4 years old, $8860, low down payment, will sell furniture. Write to Northrop News, Box 525. A

BATHINETTE; Folda-Rolla BABY CART; FOLDING GATE for any size door, best offer F. E. WADLE, FR 5-8567. A

CHEVROLET, '47, 1½-ton truck, $475; CHAIN SAW, nearly new, $175; '40 PLYMOUTH SEDAN, $75, or best offer. ROY ETTER, VE 8-5402. A

AUTOMATIC WASHER, Bendix, runs good, $20. F. A. KRAFT JR., EX 3-1092.

BIKE, girl's 24" $15; boy's 20" BIKE, $10; American Flyer TRAIN, 4 cars and track, including figure 8 track, $15. BATHTUB, $5. LEO NORMAN, OS 6-3365. A

FOR SALE

FORD, 1953 Mainliner 8, overdrive, $975. FARASH, OR 1-9556. A

HOUSE DOORS with hinges and knobs, six, $3 each or $15 for six. OS 6-7390.

HOUSE TRAILER, 1953 Victor, 28 ft., complete bath, can be financed; CYCLE JACKET, ladies', size 34, fur collar. CLISBY, OR 4-1403. A

PLYMOUTH CONVERTIBLE, 1942, $100; AUTO RADIO, Crosley, recently overhauled, $20. E. J. TROSI, FR 4-1061. A

CONTOUR CHAIR, gray plastic leather, like new, cost $82.50, $39.50. G. H. STOCKWELL, OR 2-2555, after 5:15 p.m. or weekends. A

OIL HEATER, Coleman, with blower, model 700 series, $20. J. GREEN. Write to Northrop News, Box 524. A

DODGE, 1939 with '47 engine. CARL ROSSNER, OR 7-9820. A

FORD, 1951 2 door sedan, $700. MARILYNNE ORAM, TO 3-1261. A

HEATING BLANKET, electric, double bed size, clean, used little, $10; ROTO-BROIL, "400", $20, purchased August 1 this year; 5 individual DRAWERS, $1 each. OR 4-4032. A

DE SOTO, 1952 Firedome V-8 Sportsman hard top convertible, $1250. IRVING A. STERN, FR 9-8695. A

DAVENPORT, red wool frieze, 108" overall length, $80. K. FLANAGAN, DA 6-4574. A

GAS REFRIGERATOR, Servel, good condition, $45. R. G. ECKLES, OR 1-5046. A

FREEZER, Carrier upright, 22½ cubic feet, holds approximately 750 lbs. of food. M. J. LONG, OR 2-1659. A

REFRIGERATOR, 11.2′ Coldspot Supermart, freezer on bottom, automatic defrosting, paid $400 a year ago, $225. Write to Northrop News, Box 522. A

AUSTIN, 1949 4-door sedan, $250. R. W. FEENY, EA 2-0646. A

CRIB, Storkline up to age six. Good condition, with or without mattress, $15. D. W. RIKE, AX 3-8374. A

STOVE, O'Keefe and Merritt, gas; Westinghouse automatic LAUNDROMAT, good condition, reasonable. JOYCE MILLER, FR 4-0889. A

LAWN MOWER, power, Craftsman, perfect condition, $65; GUNS, S & W .38 spec. combat masterpiece, like new, holster, $55; Hi-std. .380 auto pistol, never fired, $40. Write to Northrop News, Box 521. A

SHOTGUN, Winchester 410, used twice, 5 shot slide action, modified choke, retails for $82, $60. D. H. DAVIS, PL 6-0015. A

STENOTYPE MACHINE, used for 3 months, $35. D. CAUGHLIN, DA 6-7528.

PLYMOUTH, 1950. PL 4-4027. A

BOAT, 12′ runabout, mahogany strip and plywood, very good condition, $160. ED STERBENZ, OS 5-5431. A

MERCURY 1951 4-door sedan, overdrive, $625. JOHN G. HOFFACKER, OR 4-1608. 4-1608. A

IRONER, Thor Gladiron, portable, like new, $35. A. REIDT, PL 5-7411. A

LAWNMOWER, 18" Dunlap, cost $30. 6 months ago, $20, grass catcher free; TEARDROP TRAILER, good condition, new tires, $150. A. D. McKEEN, OS 5-2566. A

PUPPIES, AKC registered cocker spaniel. FR 4-2728 or DA 4-7961. A

MG, 1952, new paint. L. WYNROTH, 1/Lt, USAF. Write to Northrop News, Box 520. A

BOAT, 14′, deluxe runabout, 7½ h.p. motor and extras. CHARLES NASH. Write to Northrop News, Box 519. A

LUGGAGE TRAILERS, two. A. A. BEYER, OR 7-3922. A

ART EQUIPMENT, Smith's oil-less compressor, built-in motor, storage tanks; model A, Thayer & Chandler air brush; five shelved BOOKCASE, storage compartment, 30" x 46" x 13"; DRAWING BOARD TABLE, 36" x 37", 41" height; other miscellaneous items, reasonable. LOUIS MOLLICA. Write to Northrop News, Box 518. A

TV, 19"; SECTIONAL with matching chair; 2 END TABLES; corner TABLE; 2 LAMPS; 9x12 RUG and PAD; throw RUGS; DOLL BUGGY; 2 toy IRONING BOARDS; CHILD'S TABLE and chair. PL 6-7337. A

BICYCLE, boys' 26" English, like new, $35. IRENE E. HANES, OS 5-4392. A

UTILITY TRAILER, Sears built, 1-wheel, like new, 2 sets of hitches included, $45. W. H. LINDENMUTH, OS 6-6395. A

PONTIAC, '41 2-door sedan. OR 2-7715, after 5:30 p.m. A

BOAT KIT, 14′ outboard reinforced Fiberglas construction, molded deck, ready to put together, $250. W. O. WILSON, FR 4-9606. A

MOTORCYCLE, 1954, Matchless, $550 or best offer; MOTORCYCLE TRAILER, $25. JERRY CAMERON. Write to Northrop News, Box 511. A

WASHING MACHINE, ABC O-Matic, 3 years old, $50; waterless ALUMINUM SET, most of pans never used, make offer. BOB NELSON, DA 9-3702. A

TABLE SAW, Craftsman 8", ¾ h.p. motor, 2 blades, sanding discs, table, $85; PROJECTOR, 16mm sound Bell & Howell, screen, extras, $400; EXPOSURE METER, Norwood Director, sphere and grid for Cine and still, $20. C. M. OLSON, OS 5-6500. A

DRIER, never used, 1955 Westinghouse, $145; CAGE, two PARAKEETS, $5; hand LAWNMOWER, $5; MIRROR, 30" x 36", $20. JOHN PITIAK, OR 8-7445. A

Down Range . . . . . .

Lee Ohlinger, atomic authority, and chief, Northrop Computer Services, will participate in forthcoming National Industrial Conference Board meeting, New York, on panel discussion—"Outlook for Nuclear Rail, Ship, and Air Transport" . . . Meeting is being held this week in the Waldorf Astoria Hotel . . . attendance will number several hundred industrial leaders . . . NICB is devoted to research and educational programs in the interests of American business.

Ontario NRC was host to John B. Clark, director of Industrial Relations, at facility's NRC Council meeting this month . . . Norcrafters in attendance heard Clark talk on general aspects of year's activities at Northrop . . . Speaker commended facility's NRC commissioners, officers, and reps for exemplary conduct of recreation program during past year . . .

Air Defense Command Airman of Month citation has been

S/SGT. MITCHELL

awarded to Staff Sergeant Marvin H. Mitchell, of 460th FIS, Portland International Airport . . . "Eagerness and ability . . . of highest caliber" was characterization of Mitchell's August efforts that won him title . . . His aircraft flew 45 consecutive flights without a write-up, commendation concluded . . . Monthly competition is co-sponsored by ADC and Northrop.

FULL AUTO RATE PROGRESSION FOR HOURLY RATED NORCRAFTERS

Full automatic rate progression has been provided for hourly rated Norcrafters, an all-divisions bulletin from President Whitley C. Collins has announced.

The automatic plan goes into effect on November 7.

The change in the former plan is increased recognition, Collins said, of the importance of Norcrafters' desire and ability to successful operations.

The plan insures an automatic rate adjustment each 16 weeks until the maximum of the rate range has been reached. Amount of increases will usually be five cents per hour, but the plan provides that should the difference between an existing rate and the top be six or seven cents, the adjustment will be in those amounts.

By the same token, when the difference is three, four, or five cents, the rate will be adjusted by those sums.

Job performance will still be periodically reviewed by supervision, the announcement concluded.

FOR SALE

TYPEWRITER; Spanish GUITAR; CARPET SWEEPER; electric BROILER; tenor GUITAR, arched top; VIOLIN; WAFFLE IRONS; UKELELE; garage door HINGES; ELECTRIC HEATERS. J. H. BUSH. OS 6-6449. A

WASHER, Westinghouse Laundromat, $100; Gaffers & Sattler table top GAS RANGE, $25; Bendix automatic HOME IRONER console, $100. WARREN CONNER, Windsor 7-5506, Lancaster. A

DINING ROOM SET, 8-piece walnut, 6 chairs, extra leaf, $75. Will deliver in Palmdale while working in Palmdale. R. C. COLLINS, DA 4-7529. A

BUICK, 1952 Roadmaster Riviera, 2-dr., $100 cash for my equity. Take over payments of $55.85 per month, which includes insurance. OS 6-4293, after 4:30 p.m. A

FORD, 1948 coupe, $250. JAMES CARROLL, AX 2-4247. A

ELECTRIC SHAVER, Remington, dual head, excellent condition, overhauled, new blades. M. BROWN, LU 5-3067. A

GAS RANGE, 36" O'Keefe & Merritt, chrome top, clock; family size Norge REFRIGERATOR, both top condition, $100 each, or both for $180; CHEVROLET, '37 two door, $50. F. F. DAMMAN, TO 7-0593. A

CAMERAS, Argus A 35mm, F.4.5 lens, shutter 1/25 to 1/200 sec., $20; 35mm Certo, rangefinder, F2.8 Tessar lens, speeds to 1/500 sec., case, $35; folding Kodak, $10. DENVER HOWARD, OS 5-5829. A

VACUUM CLEANER, tank type, good condition, all attachments, $35. EX 8-4007. A

GAS RANGE, Kenmore automatic; Kenmore automatic WASHER, both in very good condition. WILLIAM L. McGINN. Write to Northrop News, Box 517. A

OLDSMOBILE, 1949 "88", 2 door, Hydra-Matic. $550. C. MANN, OR 2-8466. A

GUNS, Browning lightweight 12 gauge auto., 2 barrels, 28" Browning skeet and 26" with Power-Pac, $130; Remington model 31, 30" full choke barrel, $65. V. H. MARLOW, VE 9-0234. A

REFRIGERATOR, 6′ apartment size Norge, $35; rebuilt, cut-down upright Gulbransen PIANO, mahogany finish, $250. M. A. LEMOINE, OR 4-1097, after 4:30 p.m. A

HOUSE, 3-bedroom, near schools, 10 minutes from plant, w/w carpet, water-softener, garbage disposal, cement-block fences, paved patio, 2-car garage, FHA loan, $13,950. F. M. PEARMAN, DA 9-3006. A

FOR SALE

GUPPIES, all sizes. P. B. CARPENTER, FA 8-0460. A

OVERCOATS, man's heavy, 1 navy, 1 oxford gray, size 42-44, $10 each; silver fox STOLE, $75; metal WOOD BASKET, $2.50; Aero GREASE GUN, $2. B. C. BARTON, GR 7-1539. A

MOTORCYCLE, Harley Davidson, 1950 model 74, buddy seat, saddle bags, $450; CEDAR CHEST, Lane, blonde wood, $40. CHAS De ROME, PL 2-4347, after 4:30 p.m., week ends. A

HOME, ranch type, frame, 2-bedroom, den, small utility room, large 1 bedroom apt. in rear. Rents for $60 a month, partly furnished, attached to 2-car garage, $14,500, $6500 cash, $80 per month. M. ORTH, OS 6-8331. A

CROSLEY, 1949, Hot Shot roadster, $250; misc. Fiat chassis PARTS. C. D. BUNDY, FR 7-2552. A

RIFLE, .32 special Winchester, lever action, 6 boxes shells, $70. DONALD G. BRAGG, OS 6-5679. A

ACCESSORIES for MG-TD: Raycraft finned valve cover; Arnolt matched valve cover, side plate, pair Runyan windwings; Runyan luggage rack, 2 Hellings air cleaners, all good condition. JIM WOOD, RE 3-8212, after 5:00 p.m. A

BICYCLE, full size, girl's, good condition, $20; full size VIOLIN, $30; TYPEWRITER, $10. JOHN TARLAP, EX 7-2055. A

STUDEBAKER, 1947 Champion, 2-door Starlite, overdrive, $170. Q. H. CUNNINGHAM, DA 4-0267. A

HUDSON, 1940, 4-door sedan, $65. C. ENGSTRAND, OS 6-6463. A

STEEL GUITAR, fender, double neck, 8-string, case, legs, A-1 condition, $125; student model fender 6-string STEEL GUITAR, small amplifier, both for $45. SID BARNES, FR 9-1771. A

TRAILER, two wheel all metal 4′x5′, $35. FRANK ABRUZZO. PL 2-3611. A

AUTOMATIC WASHER, ABC 1950 model, $40. ALAN B. DUNIPACE, DA 9-1533. A

CADILLAC, semi-custom, 1948, Hydra-Matic, $875. BOB FOLGER, DA 9-2175.

DOBERMAN PINSCHER PUP, 8 months old, 3 time AKC show winner, $125. GENE FISHER, WI 7-4209. A

STUDEBAKER, 1947, overdrive, $150. J. KANE, WE 5-6237. A

SCOOTER, Allstate, model 1020, 1954, used very little, $145. B. C. FINCH, WI 7-2387, Palmdale. A

BOXER PUP, 7 months old, pure bred, male, cropped, all shots, plus large house, best offer. D. H. DAVIS, PL 6-0015. A

(Continued on Page 4)

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 4)
VALLEY VIEW, So. Whittier. (Will either take Rosecrans or Imperial Hwy., willing to take three riders). JOE ZUILLI (5621-40115, Ext. 2208 or 1852). 12-4

LONG BEACH BLVD. & FIRESTONE BLVD., South Gate. KARL DRAPER (5411-17071, Ext. 1491). LO 6-7210. 12-4

(Zone 5)
ROSECRANS & VALLEY VIEW, La Mirada. (Will pick up on Rosecrans or Imperial or in this vicinity). W. LA SELLE (5222-33242, Ext. 2504 or 1918). 12-5

(Zone 7)
WESTERN & REDONDO BEACH, Gardena (Will go east to Vermont and north to 135th St.) GEORGE B. LANG (5504-21730, Ext. 1363), DA 9-4016. 12-7

(Zone 8)
CRENSHAW & TORRANCE BLVD., Torrance. JIM LEAMEN (5508-19656, Ext. 1333). 12-8

(Zone 12)
LINCOLN & VENICE BLVD., Venice. J. RACETTO (5501-41006, Ext. 2200). EX 9-7675. 12-12

LINCOLN BLVD. & MARINE ST., Santa Monica. B. L. THORNTON (5524-36948, Ext. 2209). EX 9-7585. 12-12

7:30 a.m. — 4:15 p.m.

(Zone 1)
WESTERN & FOUNTAIN, Hollywood. (Car pool desired.) JERRY PAUL (5960-40685, Ext. 683). NO 3-0667. 13-1

OLYMPIC & VERMONT, Los Angeles (6). (Will travel Vermont, Western, or Crenshaw from Olympic. Can also take riders starting work at 7:00 a.m., as I arrive at 6:45 to eat breakfast at cafeteria.) J. W. LOPEY (5917-40733, Ext. 2541). DU 8-4807, between 5-6 p.m. 13-1

CENTER OF GLENDALE, Glendale. (Travel south on Vermont, Western or Crenshaw). RALPH REID (5940-24966, Ext. 2661) CI 2-2764. 13-1

(Zone 4)
SPADRA & ORANGETHORPE, Fullerton. (Another intersection; Orangethorpe & Santa Ana Freeway. Car pool considered.) DAVID HICKS (3541-31033, Ext. 2410. 13-4

MAGNOLIA & BALL ROAD, Anaheim. (Another member drives from 9th & Chapman in Garden Grove. Car pool desired.) JOHN O'LEARY (9320-27710, Ext. 2151). JAckson 7-1401. 13-4

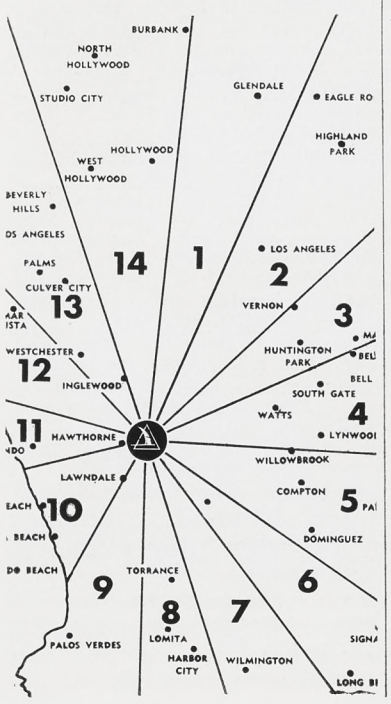
(Zone 7)
VERMONT & 182ND, Gardena. GRACE HAZLETT (4100-13375, Ext. 2331). 13-7

3:45 p.m. — 12:15 a.m.

(Zone 1)
WESTERN AVE. & EXPOSITION, Los Angeles. JOHN H. HENDERSON (5503-40196, Ext. 2681). 16-1

(Zone 12)
LINCOLN BLVD. & MARINE ST., Santa Monica. (Would like two more riders between Plant #1 and Santa Monica, or car pool.) K. A. LAMM (5587-23178, Ext. 1947). EX 9-1870. 18-12

Zone Map



RIDES OFFERED

4:45 p.m. — 1:15 a.m.

(Zone 14)
FAIRFAX & BEVERLY BLVD., Los Angeles 36. (Will pick up anywhere along LaBrea south of Beverly Blvd.) P. FRIZLER (5509-19953, Ext. 2075). WE 9-1578. 18-14

(Miscellaneous—Split Shift)

(Zone 1)
WESTERN & OLYMPIC, Los Angeles (19). (Hours: 7:30 a.m. to 6:15 p.m.). DON SCHUSTER (3332-3339, Ext. 661). RE 4-5330. 20-1

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)
WESTERN & 45TH, Los Angeles. (Car pool considered). EARNEST SMITH (5561-40563, Ext. 1280). AX 2-2276. 2-1

WESTERN AVE. & VERNON AVE., Los Angeles. MERRILL N. ANDERSON (5621-40383, Ext. 2208). AX 2-8548. 2-1

(Zone 4)
COMPTON AVE. & 97TH, Los Angeles. LLOYD H. SHEARER (5561-41073, Ext. 1280). 2-4

SLAUSON & POSSONS BLVDS., Rivera. R. HERNANDEZ (5353-16280, Ext. 1628-1686). 2-4

(Zone 5)
CARSON & ORANGE, Long Beach 7. G. J. GRUMMER (5161-14909, Ext. 2071). GA 7-4370. 2-5

(Zone 6)
CHERRY & 61ST, No. Long Beach. GEORGE C. CLEMENTS (5231-19826, Ext. 1663). TO 7-2100. 2-6

ROSECRANS & VERMONT, Gardena. LYLE P. FIELDS (5561-41074, Ext. 1280). 2-6

(Zone 8)
ARLINGTON & 237TH ST., Torrance. (Can either be on corner of Arlington & 237th St. or Pennsylvania & 237th, which is one block east of Crenshaw). VIRGINIA HUGHES (5507-19205, Ext. 526). DA 6-6650. 2-8

(Zone 9)
HAWTHORNE BLVD. & 177TH, Torrance. (Can arrive for 7:00 a.m. or 7:30 a.m. shift). MILDRED I. WILKERSON (4100-39815, Ext. 1740). FR 2-1280. 2-9

PALOS VERDES DR. AT CALLE MIRAMAR, Hollywood Riviera. (Any suitable meeting place agreeable). TONY ROBB (5621-40235, Ext. 2208). FR 5-5623. 2-9

(Zone 10)
101 HIGHWAY & AVE. C, Redondo Beach. VALERIA GIBSON (5351-35536, Ext. 2582). DA 9-6728. 2-10

(Zone 12)
ANZA & IMPERIAL, Hawthorne. (½ block east of Anza & 3 blocks south of Imperial on 117th St. or ½ mile west of Inglewood Ave.) R. A. CAREY (5501-40842, Ext. 2200). OS 6-5786. 2-12

ARBOR VITAE & INGLEWOOD AVE., Inglewood. JAKE WEGELIN (5510-20007, Ext. 2255). OR 1-5276. 2-12

(Zone 13)
LA BREA & MANCHESTER, Inglewood. KENNETH B. PASCHALL (5503-41070, Ext. 2681). OR 2-9661. 2-13

WILSHIRE & VETERAN, Los Angeles. B. C. BARTON (7210-26676, Ext. 2206). GR 7-1539. 2-13

LA BREA & CENTURY, Inglewood. RICHARD LARSON (5520-22, Ext. 2646). OR 2-9702. 2-13

7:30 a.m. — 4:15 p.m.

(Zone 1)
WESTERN & FOUNTAIN, Hollywood. (Car pool desired.) JERRY PAUL (5960-40685, Ext. 683). NO 3-0667. 3-1

(Zone 3)
VERMONT & 80TH, Los Angeles (44). VIOLET M. GALIOTO (5240-36585, Ext. 2667-2668-2669). PL 2-5732. 3-3

(Zone 4)
SPADRA & ORANGETHORPE, Fullerton. (Another intersection; Orangethorpe & Santa Ana Freeway. Car Pool considered.) DAVID HICKS (3541-31033, Ext. 2410). 3-4

MAGNOLIA & BALL ROAD, Anaheim. (Another member drives from 9th & Chapman in Garden Grove. Car pool desired.) JOHN O'LEARY (9320-27710, Ext. 2151). JAckson 7-1401. 3-4

ORANGETHORPE & BROOKHURST, Fullerton. (Want ride only one way—in the morning to Northrop). ANN MANNON (5917-24613, Ext. 2541, 1550). LA 5-7660. 3-4

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 7)
VERMONT & OCEAN (228th), Torrance. BARBARA PENKE (3143-27944, Ext. 454). FA 8-1628. 3-7

VERMONT & OCEAN (228th), Torrance. (Would like ride home only.) JEANNE GARZA (1421-12229, Ext. 1811 or 2393). DA 6-2567. 3-7

(Zone 8)
WESTERN AVE. & 205TH ST., Torrance. BARBARA GOODWIN (4240-13994, Ext. 777). FA 8-6061. 3-8

WESTERN & 227TH ST., Torrance. (Desperately need a ride. I am handicapped, will appreciate a ride). MILDRED B. DAVIS (5930-21989, Ext. 753, 754, 755). FA 8-7533. 3-8

CRENSHAW & 174TH ST., Torrance. JOYCE M. MILLER (4240-13993, Ext. 777). DA 9-7318. 3-8

(Zone 9)
HAWTHORNE BLVD. & 177TH, Torrance. (Can arrive for 7:00 a.m. or 7:30 a.m. shift). MILDRED I. WILKERSON (4100-39815, Ext. 1740). FR 2-1280. 3-9

(Zone 10)
SEPULVEDA & PIER, Hermosa Beach. ROGER URBAN (9350-40722, Ext. 1810). 3-10

MANHATTAN BEACH BLVD. & SEPULVEDA, Manhattan Beach. PAT McCOURT (9330-12019, Ext. 2228). 3-10

(Zone 11)
GREVILLEA AVE. & 120TH, Hawthorne. BETTY ECKMAN (1421-38944, Ext. 691-693). OS 6-7689. 3-11

(Zone 12)
PACIFIC HWY & WASHINGTON BLVD., Venice. A. A. SILESKI (3271-40980, Ext. 405-409). EX 9-2257. 3-12

ARBOR VITAE & AIRPORT BLVD., Westchester. (Would be willing to meet ride at intersection of Century & Airport). W. E. VAN HEMERT (3142-40692, Ext. 2022). 3-12

(Zone 14)
SANTA MONICA BLVD. & GOWER, Hollywood 38. (On direct route between Hollywood and Plant 3, via Crenshaw Blvd.). IRVIN J. PETERS (3547-30749, Ext. 1872). HO 4-0501. 3-14

SLAUSON & WEST BLVD., Los Angeles (43). (Need ride home from work only). DIANNE G. BUELL (8310-27405, Ext. 2402). AX 3-2387. 3-14

4:45 p.m. — 1:15 a.m.

(Zone 2)
HOOVER & GAGE or Figueroa & Gage, Los Angeles 44. CHARLES GOODWIN (5584-40802, Ext. 1356). PL 8-2519. 8-2

(Zone 6)
FIGUEROA & 174TH, Gardena. FELIX GENINATTI (5503-18329, Ext. 2681). DA 4-3885. 8-6

(Zone 12)
MANCHESTER & LINCOLN, Los Angeles (45). MELVIN GARNER (5373-41, Ext. 1448, 1246). OR 2-8858. 8-12

VENICE BLVD. & DELL AVE, Venice. (Would consider car pool.) EDITH JARAMILLO (5524-21459, Ext. 2209). 8-12

(Zone 13)
MISSION BLVD. & WOODLEY, Granada Hills. A. R. CLARK (5524-21833, Ext. 2209). ST 0-0623 (Message). 8-13

Miscellaneous (Split Shifts)

(Zone 9)
HAWTHORNE BLVD. & 163RD, Lawndale. (Mariposa. Hours: 6:45 a.m. to 3:30 p.m.). KATHRYN C. SWART (6455-40462, Ext. 1279). FR 2-9472. 10-9

(Zone 10)
ROSECRANS & HIGHLAND, Manhattan Beach. (Hours: 4:00 p.m. to 12:30 a.m.) ESTHER (6455-15966, Ext. 1278). 10-10

(Zone 13)
LA BREA & HARDY, Inglewood. (Mariposa: Hours: 4:00 p.m. to 12:30 a.m.). GRACE L. STURGILL (6270-13918, Ext. 614 or 2-6360). 10-13

(Zone 14)
MANCHESTER & PRAIRIE, Inglewood. (Hours: 7:15 a.m. to 4:00 p.m., Mariposa). JO ANN DAVIS (6200-73, Ext. 241, 242). OR 7-8887. 10-14

Production Training . . .

(Continued from Page 1)

to assemble and disassemble equipment, step by step. (The table of contents of a training aids handbook, for instance, is point for point the check list used by Machine Shop in checking out the trainees' learning).

A couple of years ago, production personnel point out, there was a somewhat similar training program, but on a more informal level. Written outlines were at a minimum; main dependence was on the verbal and visual transmittal of experience and skill.

When, less than a year ago, it was discovered that ready-trained machine operators were difficult to find, the present program was completed, with comprehensive, detailed written training aids outlining the shop know-how.

The trainee gets not only the fundamentals of machine operation, but he also "learns the ropes" with respect to E.O.'s; Planning Operation Sheets; the importance of time slips; the part Manufacturing service departments play in relation to his job—all the everyday facets of Machine Shop activities.

On the higher plane, then, the eventual result of the program is continued Scorpion reliability. "Graduates" are already contributing to that result as they man vital equipment in the Machine Shop.

BBSF CLASSIFIEDS

(Continued from Page 3)

FOR SALE

HOUSE, close to Northrop, 2-bedroom, w/w carpeting, covered flagstone patio, block fence, garage, $975 down, $79 month. MARTINEZ. Write to Northrop News, Box 515. A

WASHER, Maytag, wringer type, $25; automatic Southern Electric DEEP-FRY COOKER, 5½ qt., never used, $12. E. GRIFFIN, OS 6-3862. A

POODLE PUPPIES, toys, all colors, males, AKC, $200 and up. R. E. SANDERS, FR 2-5135, after 5 p.m. or weekends. A

FORD, 1941 V-8 convertible, rebuilt engine, $100. H. C. KLINE, PL 9-6332.

RINGS, matched set, white gold diamond, $250, original price, $540. P. J. CUDE, FR 9-9542. A

VACUUM, Kirby, 1 mo. old. FR 4-3657, before 4 p.m. A

MOTORCYCLE, lightweight Mustang Colt 1946, windbreaker, dual pipes, $75. EARL L. HAPPOLDT, OR 1-8475. A

SOFA AND CHAIR, Monterey; GAS HEATER; Servel REFRIGERATOR; all excellent condition, sacrifice. M. A. ROJAS, JR., CA 2-4362 or AN 1-5301. A

WANTED TO BUY

MAHOGANY TABLES, 1 coffee table, 2 end tables, must be in good condition. PL 2-7475, after 5 p.m. B

TYPEWRITER, second-hand in good condition. MARY DRAKE, OR 8-2404. B

RECORDS, 45 RPM only, must be reasonable. LARRY LAUER, FR 4-4140. B

JAGUAR, 1951 roadster, top or frame alone, must be in good condition. G. C. TATE, DA 4-6338. B

SHOP SMITH or 10" TABLE SAW, in good condition. SID BARNES, FR 9-1771.

ADDING MACHINE, good condition, cheap. R. M. WILKES, EX 8-2488. B

MULTILITH, must be reasonable. M. ORTH. Write to Northrop News, Box 516. B

BICYCLE, boy's 24" racing, lightweight. M. H. DAZEY, FR 5-5298. B

GAS ENGINE, small Maytag or Briggs & Stratton in running condition. J. D. HALSTEAD, OS 5-7774. B

SHIP TO SHORE RADIO; FATHOMETER; also need small DINGHY, items need not be new condition. DAVID H. GLABE. Write to Northrop News, Box 523. B

WINTER COAT, ladies, size 12. CLISBY, OR 4-1403. B

SHAVER, old Remington Rand, suitable for parts; bench DRILL PRESS, good condition. A. L. RIGBY, KE 5-6296. B

CHOW PUPPY, two to six months old, male preferred. B. M. ODDY, OS 5-6473.

FOR TRADE

PORTABLE RADIO, excellent condition, trade for 35mm slide projector of equal value or what have you? Write to Northrop News, Box 514. C

REVOLVER, .38 cal. S & W for F.M. tuner. LARRY LAUER, FR 4-4140. C

FREE (To be given away)

KITTEN, black, 4 months old. GRACE H. HEATH, AX 2-4363. D

RENTALS OFFERED

HOUSE, 6 rooms, 3 bedroom, unfurnished, children OK, water paid, near USC, $85 month. JIM OBBEMA, RE 3-6430. E

HOME, furnished, 5-room, adults only. OR 2-1300. E

APARTMENTS, new, 1 and 2 bedroom, garages, washer and dryer. 1 month free rent on year lease, near 3 schools. From $80. PL 3-3788. E

HOUSE, two-bedroom furnished, garage, $95 per month, water paid; HOUSE, furnished, in rear, $50 per month, utilities paid, private, 1½ blocks from Northrop, one man preferred, or working couple. OS 6-1607 or DA 9-5760. E

RENTALS OFFERED

HOUSE, 4-bedroom, Lake Arrowhead, by week or day, reasonable. DOROTHY MOORE, DA 4-5774, after 6:00 p.m. E

APARTMENT, unfurnished, 1 bedroom, very modern, $65. A. J. VITA. Write to Northrop News, Box 505. E

STORE BUILDING, clean, well ventilated, 9600 sq. ft., some restaurant equipment in building, $95 month. Hawthorne. ADA N. BURY, OS 6-2441. E

APARTMENT, new, 2-bedroom, unfurnished, thermo heat, garage, automatic washer and drier, children OK, near Century and Crenshaw, $95. L. M. KNIGHT, EX 6-6823. E

ROOM, private, for 1 man; or one lady to SHARE HOUSE with two women. PL 6-1928, after 5 p.m. E

HOUSE, furnished, 3 rooms and dinette, no pets, one or two children OK. OS 5-5439. E

APARTMENT, modern unfurnished one-bedroom, garbage disposal, garage. Three blocks to plant 1, $72.50. R. W. FEENY, EA 2-0646. E

ROOM AND BOARD, garage, prefer person 35 years or older. R. H. SCHLIEBE, PL 1-8394. E

FURNISHED HOUSE, 1 bedroom, within 1 mile of Northrop, no pets, $70 month. R. G. ECKLES, OR 1-5046. E

FURNISHED ROOM, $8 per week, 5 blocks from Northrop, Hawthorne, quiet. OS 5-5850. E

HOME, 2-bedroom, large fenced yard, children OK, $75 month, North Redondo. OS 6-6074. E

HOUSE, unfurnished, 2-bedroom, 15 min. from Northrop, $80 month; furnished 1-bedroom APARTMENT within walking distance of Plant One, $60 month. ALICE COX, OS 6-5812. E

PRIVATE ROOM and bath, separate from house, $10 per week. OS 6-8512. E

SHARE APARTMENT—Will share furnished apartment with one girl, Inglewood, near plant. HELEN MILLER, OR 2-1884. E

RENTALS WANTED

SMALL APARTMENT OR LARGE ROOM, would like to have child care on premises. Hours 6:30 to 4:00 p.m. 1 child 20 months old. ALICE HARTNESS, OS 6-6353. F

HOUSE, 2 bedroom, fenced back yard, near Northrop or in Inglewood area, approximately $85 per month. OR 2-9482. F

HOUSE, 2-bedroom furnished, two children, ages 2 and 4 years, $80 per month. WALTER COX. Write to Northrop News, Box 504. F

CHILD CARE OFFERED

CHILD CARE, ages 3 to 10 yrs., near schools, fenced yard, hot lunches, naps. 1 mile from Northrop. Day or night shift. OS 5-7993. G

CHILD CARE, day nursery, ages 3 yrs and up, close to school, fenced yard. Balanced diet, naps if desired, licensed. OS 6-6566. G

PERSONALS

SINCERE THANKS—It is with sincere appreciation that we wish to express our thanks to our many thoughtful and sincere friends here at Northrop. The cards, flowers, and check were deeply appreciated by both of us. PAT GARLOW AND SHIRLEY GARLOW. L

STORAGE, will store fine furniture or electric organ for one year, or two for use. DON SCHUSTER, RE 4-5330. L

FOR SALE OR TRADE

CADILLAC ENGINE, 1949, rebuilt, bored 4", Chet Herbert cam, all new parts; 1937 Cadillac floor shift TRANSMISSION. Engine and trans. ready to run. C. C. MARTIN. Write to Northrop News, Box 513. M

MOTORCYCLE, Harley-Davidson, full dress, 80 cubic inch, sell or trade for small car. CAROL C. BELL. Write to Northrop News, Box 503. M

FORD, 1935 V-8 3-window coupe, sell or trade for Hi-Fi equipment or tape recorder. R. BAUER, DU 6-9963. M

CADILLAC, 1949, 62 4-door sedan, pick up payments, plus old car that runs, for my equity. JOE LA BIANCO, FR 4-9106, apt. A. M

LINCOLN, 1947, '48 Mercury engine; Hi-Fi 2-way SPEAKER SYSTEM; 1.5 h.p. GE 110/220 volt heavy-duty MOTOR; RCA 40-watt POWER AMPLIFIER; chrome DINETTE SET; DAVENPORT, CHAIR suite. Will trade for motor-boat equipment, slide projector, or electronic test equipment (scope, combination tube-tester, VTVM). W. S. COOK, DA 6-2467, evenings or weekends. M

FLOOR FURNACE, Holly dual wall 32,000 BTU, 2 years old. Sell or trade for Hi-Fi equipment, short wave receiver, archery equipment. C. F. WATSON, LO 7-3222, after 5 p.m. M

CHEVROLET, 1937 coupe, $50; 1941 DODGE sedan, new motor, $75; 4'x8' UTILITY TRAILER, steel construction, $50. Will consider trade any of above for wood working power tools. GEORGE BRANCH, OS 5-2594. M

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
Practice sessions, Gardena High School, every Wednesday evening at 6:45 p.m.

BIBLE STUDY, Roy Stahl
Meet daily, Plant I, east mezzanine conference room, 11:30 a.m.; Plant II, second floor, center conference room, 12:00 p.m.; Plant III, conference room, 11:00; Nash Building, 12:15.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Ralph Vincent

BOWLING (nights), Garland Steiner
Winter leagues now in progress.

BRIDGE CLUB, Walt Darby
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Robert Carberry
Meet every other Friday evening, 7:30 p.m. Next Oct. 28.

CAMERA CLUB (nights), Gene Beck
Meet every other Saturday, 7:30 p.m. Next—Oct. 29.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF, Andy Titus
Tournament at Alondra, November 20.

GOLF, (nights) Leo Baker
Winter league now forming—Monday mornings.

GUN CLUB (days), Dick Booth
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—Nov. 7.

MIXED CHORUS, Florence Graveline
Meet every Wednesday evening, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Bill Kappele
Meet 1st and 3rd Tuesday of each month at Annex, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Friday after work (1:30 a.m.)—Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—Oct. 29.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING CLUB (nights), Tex Hylton
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays. Beginning class Sunday afternoons from 3:00 to 5:00 p.m.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins
Winter leagues now in progress.

DINNER CLUB, Hazel Stewart
Monthly dinner meetings.

INTERIOR DECORATION
Weekly meetings in lampshade making Thursdays, 7:30 p.m.

SENIOR GIRL SCOUT TROOP (Mariners), May Hawkins
Meet Tuesdays, 7 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Vi Murphy
Meet first, third Thursdays, 7:30 p.m.

SPORTS *The Northrop News*

JUNIOR ARTISTS CALLED

IT'S THAT TIME AGAIN—. In case anyone is confused—that is Elmer Chiodo, former NRC Boat Club comish, and wife Helen, all dressed up for the forthcoming annual Boat Club costume ball. The increasingly popular event will be held on Saturday, November 5 at the NRC Clubhouse Annex. Dancing to Johnny Herrick's music will start at 9:00 p.m. Ducats are $1 per person. Prizes will be awarded for best dressed couple, best lady's costume, best man's costume, and door prize. All Norcrafters invited.

SHOW RULES SET FOR JUNIORS

In keeping with NRC policy of inviting family participation in Northrop-sponsored activities and to encourage junior Norcrafter artists, the Junior Division of the annual Northrop Art Exhibit extends a special invitation to all young Norcrafter artists age 14 and under.

Following are the rules governing the junior division:

DATES: Works are due in the Personnel Activities office, Plant I, III, or at any of the outlying facilities, no later than November 18, 1955. Exhibits will hang in the Crenshaw cafeteria from November 21 through December 2 and in the Plant I cafeteria from December 5 through December 16.

ENTRIES: Any medium, such as oil, water color, tempera, pastel, drawings in black and white or color. Note: No presketch or number painting kit pictures will be accepted. No limitation is placed on subject matter and work may be done on any material. Entry by any one artist is limited to one picture. Pictures must be original—not copies of other paintings or professional photographs.

SIZE AND PRESENTATION: Minimum size shall be 8x10 inches. Maximum dimension (either height or width) including material and frame, if any, shall be 48 inches. Pictures need not necessarily be framed.

JUDGING and PRIZES: Judging will be done by the same jury of prominent artists which judges the Purchase Prize Exhibit. Ribbon awards will be presented first, second, and third place and two honorable mention winners. In addition, the first place winner will receive an award of art supplies in the medium of his or her choice.

ELIGIBILITY: Open to all Norcrafter's sons and daughters age 14 years and under (who are under 14 years of age on November 19, 1955).

Ninth Annual Art Show Slated For November 18

This year marks the ninth consecutive year for the annual Northrop Purchase Prize Art Exhibit.

The exhibit serves a threefold purpose—it encourages interest in a personnel activity; gives Norcrafter artists an opportunity to display their art work and compete for valuable prizes; and it allows Norcrafters to view an outstanding exhibit of art by fellow Norcrafters and to purchase from the exhibitor personnel three works to be permanently hung in Northrop buildings.

Following are some of the rules governing entries in this prize exhibit. A complete listing of rules, including media, size, and presentation, may be obtained from Personnel Activities offices, all plants and facilities.

DATE: Works due in Personnel Activities Offices, Plants I, III, Anaheim, or at any of the outlying facilities no later than November 18, 1955. Exhibition to hang at Plant III cafeteria November 21 to December 2 and at Plant I cafeteria from December 5 to December 16.

ELIGIBILITY: The exhibit is open to all Norcrafters and their immediate families, i.e., husband, wife, dependent son or daughter.

JUDGING. Three pictures will be chosen for first, second, and third awards by a jury of professional artists (non-Norcrafters).

PRIZES: First place winner will be purchased for $100, second place for $75, and third place for $50. In addition, the jury will award seven honorable mention prizes to be furnished by the NRC.

SWEEPSTAKES AWARD: Plant personnel will vote for their favorite pictures on ballots available in the cafeterias during exhibition. Winner of this balloting to receive Sweepstakes Trophy furnished by NRC. This trophy will be suitably engraved with winner's name and data about the show.

Year's Doll Dressing Plans Told

With the rapid approach of the Yuletide season, NRC folk are busily making preparations for NRC events traditional with the year-end holidays.

Busiest among these are the members of the NRC Special Events committee. With Ernie Boren, chairman, and Walt DeVore, Dorothy Lewis, Leslie Greer, and Jack Gibilisco rounding out the group, the committee is master-minding the arrangements for the annual Art Exhibit, Doll Dressing Contest, Palladium party, and the Children's Christmas party.

Of prime importance at the present time are arrangements for the doll dressing contest.

This year much the same program will be followed as in the past. Eleven-inch unclad dolls will be available sometime during the first part of November for pick-up at Personnel Activities offices, Plants I and III.

Deadline date for return of the dolls will be announced.

The contest will be divided into two categories—best dressed and most unique costume. Prizes will be awarded in each class.

The dolls will be on display in the Plant I cafeteria prior to the judging and in the NRC Clubhouse following the contest.

Contest details will be announced at a later date.

Anaheim BC Party Tops, Say Sailors

By HAL HUNSBERGER
President
Northrop Recreation Club

Terrific — stupendous — and colossal are only a few of the Hollywood-type adjectives being attached to descriptions of the recent NRC Boat Club party - cruise which was hosted by the Anaheim division Boat Club.

With Anaheim Fleet Captain Jim Evans and wife Clare at the helm, the event started with a cruise touring the Balboa and Newport harbor areas, and ended with an evening of dining and dancing.

The Hawthorne sailors formed a flotilla of about 20 boats and sailed from San Pedro on Saturday morning. They were met at the harbor entrance by Host Evans and the harbor master and escorted to their moorings, which had been arranged by the Newport harbor master.

Landlubbers who attended the event arrived by car and were picked up at the harbor master's dock by the hosting division boats. They joined the Hawthorne flotilla and the cruise began. Nearly 30 boats participated in the harbor tour.

In the evening after the tour, the group decended upon the Park Avenue Cafe in Balboa—which had been reserved for the occasion by the Anaheim hosts—for a post-cruise dinner dance.

Dancing music was provided by the Anaheim Hot Shots—Anaheim Norcrafters Bill Long on piano and Gene Galenti on drums and, in the words of Elmer Chiodo, Boat Club publicity representative, "the boys really made mad music".

It was an event to be remembered and the Anaheim Club is being deluged with verbal bouquets from their guests for a well organized and enjoyable cruise and party.

Pinochle - a la Champs

WINNERS IN ACTION—. Pictured during recent Edwards AF Base facility pinochle tourney are Norcrafters Betty Niessen, Frank Harrison, Clarence Poltowicz, and Lou Drazin. This was final game of tournament and Frank and Lou took the game to win first place in the competition and the trophies. Pinochle is popular lunch-time activity and competition drew a large number of desert Norcrafters.

THE Northrop Scene BY DAY AND NIGHT

Forty-Niners' Big Day

UNIQUE BIRTHDAY party was one held recently by Advanced Tool Fabrication (5449). It celebrated department's first year. Day shift is shown. Front: Gene Gruber, Jim Mattox, Steve Smith, Jim Lanz, Joe Marsh, George Lehman, Don Alger, Dorothy Lewis, Wes Lamason, Andy Anderson, Pop Durbin, Phil Burke, Bill Eubanks, Ernie Comer, Willie Howard, Dotty Marsh, John Birt, Shorty LaMarsna, Nolan Kidd, Ed Slawinski. Middle: Jack Carmichael, Dan Scotts, Larry Bell, Harold Wagner, Vergle Case, Jay Berg, Henry Crowell, Don Fehlman, Orv Gray, Claude Williams, Maurice Tadd. In rear row: Bob Clifton, Dave Garrison, Dave Taylor, Lynn Taylor, Red Barrett, Ken Pyott. Twin birthday cakes, complete to jig builder and jig, and decorated in tooling motif, were made by Mrs. Howard Stoten, wife of night foreman.

Airlines Admirals

TWO NEW "Admiral of the Flagship Fleet" commissions from American Airlines went recently to Jack Hinchliffe, manager, Materiel, and Vice-president Kenneth P. Bowen, Manufacturing. At commissioning, from left: Northrop Traffic Manager Bill Zuetell; Hinchliffe; Walt Krieger, AA sales rep; and Bowen.

TOASTMASTERS INTERNATIONAL President Jack Haynes installed both day and night shift TM club officers at ceremony held early this month at Scully's. Here are newly-installed officers of Northrop TMs #212: Henry Cooper, Area 12 educational chairman; Howard Means, treasurer; Fred Barger, administrative vice-president; Haynes; Dave Leedy, president; Howard Cornelius, educational veep; Joe Wenkunas, secretary; Milo Griffin, publicity director; Jim Lynch, sergeant-at-arms. Clubs are preparing for humorous speech contest, Western Roundup.

Scorpion Club Grows

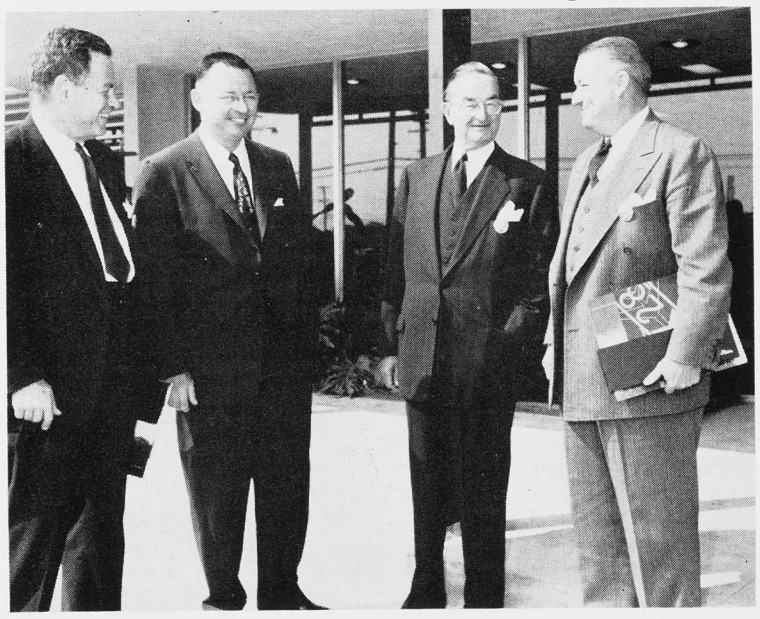
MICHIGAN Air National Guard pilots stationed at Battle Creek with 172nd Fighter Interceptor Squadron checked out in Scorpions recently. Northrop Tech Rep Hoyt Shaw was on hand to present models and pins. He is shown with Lieutenant Colonel Robert W. Flagg and Major Richard Ford, base detachment commander and base maintenance officer, respectively, ANG, Battle Creek. Pilots and ROs of 172nd also received the tokens of membership in Scorpion Club.

NIGHT SHIFT Toastmasters, members of Nor-Air #1398 club, elected this new slate to head club activities for next six months: Walt Brown, publicity; Sam Grutsis, educational vice-prexy; Ken Davidson, president; Jack Haynes, International president and installing officer; Les Rowe, treasurer; Bill Cox, secretary; Denny Swain, sergeant-at-arms; and Barney Rentz, administrative vice-president. Davidson succeeded Ward Newton; in day shift club, Leedy assumed post held last term by Bill Steffen. Ken McBride was toastmaster for evening, which attracted 150.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, November 9, 1955

Distinguished Visitors From the Pentagon



DEPUTY SECRETARY of Defense Reuben Robertson, jr., accompanied by Assistant Secretary of the Air Force Trevor Gardner, visited Hawthorne plant recently for study of number of Northrop products. Shown in photo: John Macauley, deputy assistant secretary for R&D; Gardner; Northrop President Whitley C. Collins; Robertson. Anaheim and Radioplane products, as well as Hawthorne work, were on display for Secretaries' perusal during their visit . . .

KEYS TO RELIABILITY

MANUFACTURING REVIEWS PROGRESS

Long-accepted Northrop production practices — which have effectively contributed to increased reliability in Scorpion manufacture, along with decreased costs—have come in for renewed emphasis as the result of the "Ten Keys to Conservation" display recently constructed.

Made by the Conservation department to show at a combined Air Force - industry meeting held in St. Louis, the display was based on the tried and true methods used by Norcrafters to utilize ingenuity and skills effectively.

Manufacturing division departments, in particular, have for some time been measuring their achievements against the yardstick that became the outline of "Ten Keys to Conservation." Several hard hitting methods programs are in effect which emphatically point out the physical interpretation which the Ten Keys to Conservation outline.

A methods program in the Fabrication departments is in effect which covers many important portrayals which provide the key guide to cost reductions and methods improvements for these departments.

Among such analyses are: the reasons for down time; evaluations of area usage establishing standards of percentage utilization; analyses of existing capacities and potential capacities that are available through rearrangement and implementation with secondary production aids and equipment.

Others: analyses that indicate the square footage usage per worker by each specific type of department, creating a goal constantly being reached for by the Methods organizations; studies showing the relationship of capacity to planning; constant modernization studies indicating how existing equipment can be more effectively used with additions of accessories, attachments, feed mechanisms.

Still other analyses indicate cost reduction possibilities due to relationship of location of equipment and tools, equipment and dies; and capacity studies show effects of inspection practices on output and cycle time. All are only a few of the programs in effect in the Manufacturing division.

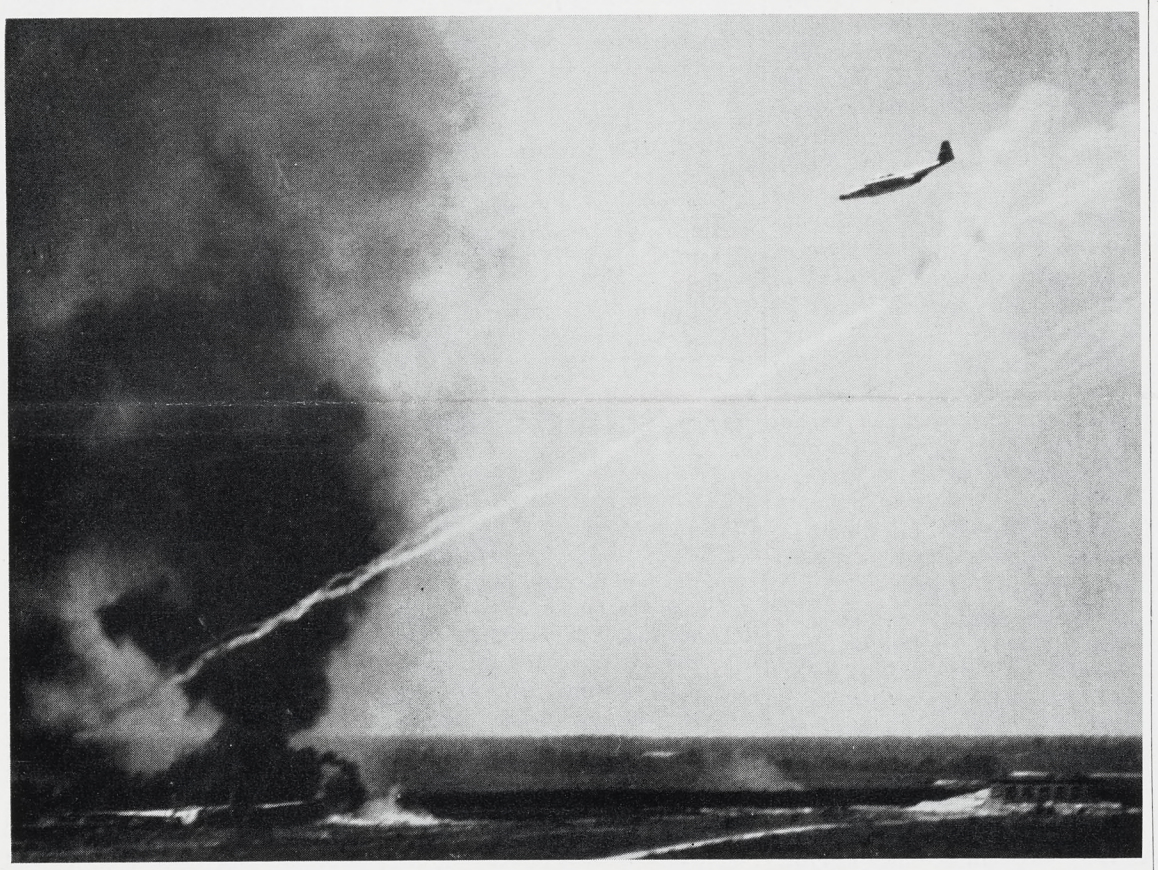
The record shows a substantial reduction in costs resulting from astute planning, exercise of individual ingenuity, simplification of job procedures, methods improvement, and application of new techniques whenever applicable.

Manufacturing flow time on the '89, for example—as long ago as last May—was down from 24 to 16 months. Per pound costs had decreased from $69 at the start of the program to $22 despite many changes for combat improvements amounting, sometimes, to 45 per cent.

According to the latest issue of the AMPR Management Operating Ratios report, published by the Air Force, Northrop performance in man-hours per pound has been consistently below the industry average for the entire F-89 program, and has gained top position in the indus-

(Continued on Page 2)

Punch—!



SCORPION D UNLOADS deadly charge of 104 rockets at parked aircraft target at Eglin Air Force Base—October 11. Occasion was Air Force Aerial Firepower demonstration. "Eighty-nine" stole rocket show by simultaneous triggering of double the number of rockets of any other aircraft at the meet. Show lasted one hour and 45 minutes; was witnessed by 2800 awed onlookers. Latest in Air Force equipment was on split-second timed test parade. (Story is on page 2.)

Vendor-Vendee Program Utilizes Outside Skills

An established program of Northrop to utilize the proved skills of vendors will, in the long run, prove to be of immense mutual benefit to Northrop and the vendors who supply the company.

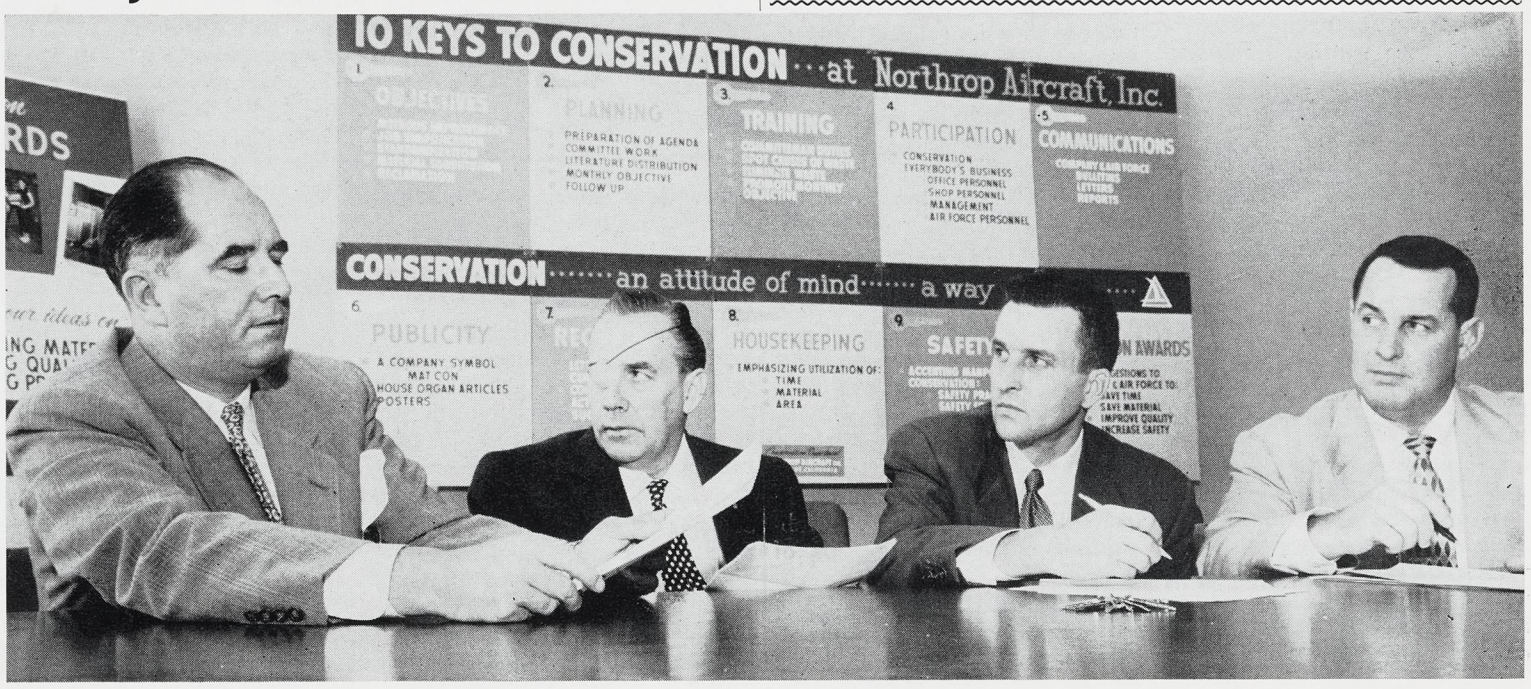
The vital project is called the Product Improvement Program, and consists of periodic conferences attended by vendors and representatives of Materiel, Quality Control, Manufacturing, and Engineering.

Reports have been received regularly by Materiel from the visitors to indicate that an already firm area of understanding had been widened as the result of the conferences. All attending reps had been invited to air their questions and difficulties freely.

As a result of the conferences, a Materiel division Norcrafter stated that a number of proceedu-

(Continued on Page 2)

Production Objectives in Review



MANUFACTURING division top-level representatives review application of "Ten Keys to Conservation" principles in production. Vice-president Kenneth P. Bowen is outlining the review to C. B. Spencer, George Chalmers and Tom McCarthy. Display board behind them, listing key principles, was used in St. Louis at combined Air Force-industry meeting on conservation. (See story on this page.)

Palmdale Section

NRC-PALMDALE'S BIGGEST success to date, October 27's "Trick or Treat" party, brought out 1600 Norcrafter juniors, parents, friends. Prizes for best costumes included two for little Richard Scott Ashe and Denise Galvin. Couple of days later, juniors, equipped with large-model Junior Norcrafter Trick or Treat bags, spread through Antelope Valley in Halloween spirit. Reports have it that good average for door-knocking by Trick-Treaters was 100 per cent.

ALL-PLANTS DANCE

Eglin Shows Rocket Fire Of Scorpion

An F-89D aircraft, loaded with full complement of 104 deadly rockets, flashed through the scattered clouds in the Florida sky. In the next instant 2800 spellbound onlookers saw the big fighter unleash a blistering simultaneous 104-rocket attack on three parked aircraft.

The '89 was near "deck" altitude and not over 300 yards away.

The parked aircraft—World War II B-24s — exploded in smoke and flame. The '89 pulled

By AIREPORTER

up in a sharp climb, rolled in salute to the crowd, and disappeared over the horizon.

The event was the Aerial Firepower Demonstration for the Joint Civilian Orientation Conference. Location was the Air Force Proving Ground, Eglin Air Force Base, Florida.

Demonstration was continuous for one hour and 45 minutes.

Aircraft industrial press, 41 in number, were special guests of the Air Force.

The Air Force "Sunday punch", short of the atomic bomb, was on parade in all departments from fighters through bombers and transports to helicopters.

Rockets played a headline part on the show, with the F-89D being heaviest armed.

Special feature was the new "toss bombing" technique demonstrated by F-84s and the American version of the British Canberra, the B-57, a vicious-looking airplane with bobbed vertical stabilizer. Toss bombing is done by the airplane pulling into a steep climb, releasing the bomb during the climb, the aircraft goes up, rolls out at altitude and streaks away to safety. The bomb continues to climb in a giant parabolic curve and is exploded on descent over target at predetermined altitude.

Precision timing of events was an outstanding element of the show—some events were spaced as little as one minute apart with different aircraft assigned to different targets approaching from miles-away departure points. Super clockwork and coordination marked the entire affair.

ANNUAL PRIVATE PARTY SCHEDULED

The biggest of all the pre-holiday season social events for Norcrafters—the annual Palladium Private Party—will be held this year on Saturday, December 3.

On this date, Norcrafters from all plants and all facilities will converge on the Hollywood Palladium for an evening of dining and dancing. The Palladium which has been newly redecorated—$165,000 worth—will be reserved solely for Norcrafters and their guests on this special night.

This will be the third year for the Private Party. The tremendous success of the past two parties has made the event an annual "must" on the NRC calendar, and it is indicated that this year's party will be even greater.

Maestro Russ Morgan will provide his famous "Music in the Morgan Manner". The Signatures, versatile playing and singing combo, will be featured as special entertainment.

Ducats—limited in number—will be available at $1.00 each from department clerks and from Personnel Activities offices in outlying facilities. No tickets will be sold at the door.

Again this year, according to NRC prexy Hal Hunsberger, tickets will be allocated to departments in proportion to their personnel count, to give all Norcrafters equal chance to attend. The limiting of the number of tickets will insure comfortable dancing space for all party-goers.

Dinner reservations may be obtained, although dinner is optional. Reservations may be placed through the Personnel Activities office. These reservations are also limited and should be placed at the earliest convenience of the Norcrafters wishing them.

Dinner will be served from 7:30 to 9:30 p.m. The price of a full course dinner starts at $2.00.

The Private Party program committee this year consists of: Charles Boyle, manager, Personnel Activities and Services Administration; and NRC Special Events committee members Ernie Boren, chairman; Walt DeVore, Dorothy Lewis, Leslie Greer, and Jack Gibilisco.

RUSS MORGAN

Keys to Reliability . . .

(Continued from Page 1)

try in the efficient utilization of direct area, measured by direct man hours per square foot of direct area.

At about the same time the Machine Shop pioneered multiple operations methods to conserve capacity and increase output against the employment of new tool techniques in coordination with the Production Engineering departments.

Multiple parts machining practices are increasing daily. Unlike parts are matched in gang type tools so that one pass of the cutter permits a machining of several surfaces on like and unlike parts. Constant research on type of standard holding fixtures as attachments to metal removing equipment is simplifying tool requirements and permitting greater application of production methods to job lot quantities.

Use of latest developments in carbides and a constantly stepped-up cutter program enabling use of maximum feeds and speeds have shown a telling effect on the workload within the Machine Shop.

HANDLING

Material handling, by far the greatest percentage user of the dollar cost of any end product, is under continued study by the combined Manufacturing-Materiel team. The expert and carefully analyzed material handling operation indicating the total poundage of raw material, purchased parts, and government furnished equipment flowing through the plant is constantly under study. Square footage in the plant required to handle this flow of material in the storage areas, racks, flats, and wheeled vehicles is being studied to eliminate dead storage in any manner and to keep live "material" in operation through the plant.

Step by step, the Manufacturing-Materiel division team is carefully cutting down in-process inventory investment, flow time requirements, and manual handling of material with applications of gravity conveyors, chutes, drops, live rolls, to keep material moving by its own weight along the operational lines which the material must travel.

WIDESPREAD EFFECT

The gross weight of the end product delivered each month is a measuring stick to which the in-process material is measured as a standard. Day by day, the poundage relationship between in-process and delivered units is coming closer and closer to the ultimate desirable relationship.

And in the indirect field—an indication that the effective operations were widespread — a methods change showed an annual saving of over $100,000 in handling of property control records.

Meanwhile, Manufacturing Research and Development has been making studies aimed at the future, including use of honeycomb cores for aircraft structure; draw-forming with rubber punch; metal-to-metal bonding; research on light steel, and many other studies related to aircraft production requirements anticipated during the next ten or more years. This program is based on the premise that performance requirements of future aircraft will render unusable many of the materials and components used today, or will require special provision to withstand excessive heat and stresses. Studies are also continuing in tooling, machining, plastics, fabrication, and welding fields of endeavor.

In the areas of methods and job simplification Production Engineering has already made an outstanding showing in the industry (see News issue of June 22), providing the vital link between design and production. Close cooperation between Engineering and Production Engineering has demonstrated substantial savings in cycle time by using advance information to incorporate improved production methods into the original design.

Practiced and perfected on Scorpion contracts with proven results, and augmented by techniques developed on sub-contract activity, Norcrafter operations have been honed to keen edge in preparation for future contracts.

Vendor-Vendee Program

(Continued from Page 1)

ral changes have been installed within the company to insure the reliability and on-schedule receipt of top quality products.

The program dovetails Quality Control phase of vendor quality with the Materiel division phase of value analysis and cost reduction, and it draws heavily upon the experience and skill of vendors who are specialists in the manufacture of components and assemblies needed in Northrop production.

Further, the program results—through the cooperative effort of Engineering, Manufacturing, Quality Control and Materiel—in maximum results in qualification testing, and environmental testing of vendor products. Reps of the four Northrop divisions mentioned earlier—and reps of vendors who attend—are those personnel who are directly concerned with the design, production, inspection and supply of parts under discussion—a grass-roots type of representation.

One of the techniques under consideration will encourage prospective bidders to contribute their knowledge and their suggestions to the company before design is finalized and bids asked. The method potentially will iron out many difficulties long before production.

Conferences have proved fruitful in laying bare difficulties which might otherwise be overlooked, and which can cause a number of rejections of vendors' products.

"If the conferences did nothing more than that," one of the personnel attending said, "it would have been a noteworthy accomplishment."

"We have found, in tabulating rejections and shortages, that there is a definite correlation between the two. So if we can help reduce the rejection rate by gaining a better understanding with vendors, we will also hold down shortages."

Generally, the program outlines to vendors what Northrop wants; shows them the processes we go through; and demonstrates what services are available here for their use as parts of the Northrop production team. Included are Quality Control, Tool Liaison, and Liaison Engineering services, among others.

And the key to the closer relationship is the simple reminder that Northrop is as close as the nearest telephone!

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 6

Published every other Wednesday by
INDUSTRIAL RELATIONS DIVISION, NORTHROP AIRCRAFT, INC.
JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

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News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — Wednesday noon one week before issue date.

FOR SALE

BOWLING BALL, 16 lb. Ebonite, used twice, cost $23, $12.50; BOWLING SHOES, ladies white oxford, size 5, worn twice, cost $12, $5. Write to Northrop News, Box 613. A

MOTORBIKE, 125 H. D., as is, $25 cash. PAUL POZEMSKY, OS 5-8062. A

WALL FURNACE, Pioneer dual, has double burners, automatic pilots, used one year, complete, $35. LLOYD W. SMELSER, DA 9-5579. A

TRAILER, 2-wheel, 4′ x 6′, hitch and canvas cover; plastic AUTO GARAGE, used one week; yellow inlaid western BOOTS, size 8½. Best offer. ARTHUR ECK, DA 9-3739. A

SHAVER, used Schick Super, good condition, $5; Swiss-made POCKET TRIPOD with tilting head, folds to 10″, all aluminum, $8; various assorted PHOTOGRAPHIC CHEMICALS; like new Kodak projection PRINT SCALE, $1; laboratory THERMOMETER 12″, $3. HO 4-7747, around 3 p.m. A

SCREEN DOOR, 42″ wide, 7′ long, never used, paid $15, $10. D. J. QUINLAN, FR 5-3149, after 4:30 p.m. A

REFRIGERATOR, 7 cubic foot, $50; almost new .22 semi-automatic RIFLE, $25. PETE CARLISLE. Write to Northrop News, Box 612. A

STEEL GUITAR, fender electric, with amplifier, like new, $75; Olds Ambassador TRUMPET, mute, case, case cover, like new, $95. E. L. FREDERICK, EX 6-4962. A

WELDER, 300 amp Lincoln, on trailer using DeSoto gas engine drive, 220/440 volt drive if desired, $395. R. MURANE, KEystone 5-7332, after 5:00 p.m. A

M.G. auto, 1951, TD, louvered hood, $900. E. J. SOWLE, FR 4-5003. A

FORD, 1947 club coupe, $175 cash. TROP A. HOPPERT. OS 5-8048.

BICYCLE, Boys' 16 inch, very good condition, $15. T. L. LAMB, FR 2-2406, after 6 p.m. or weekends. A

PIANO, upright, well cared for, $125; MOTORCYCLE, '50 Excelsior 200 c.c., mechanically excellent, $150. C. G. INGRAM, PL 7-1624. A

DINETTE SET, chrome, 4 red leather chairs, red formica table; also glass top COFFEE TABLE, 2 matching glass top END TABLES, mahogany finish, good condition. RICHARD R. FREDRICKSON, FR 9-2659.

RUG, 9′ x 12′ gray cotton loop twist, just cleaned, excellent condition, $20. NE 1-4712, after 5 p.m. A

BUICK, 1954 Riviera, must sell, owner going overseas. FR 9-1144. A

SYPHON, Sparklets, refillable, chrome, cut soda costs at Christmas, near new, cost $15. $5. PL 4-4384. A

SHOTGUN, 12 gauge, pump action, Ranger model, clean, $45. CHRISTINE E. GAY, FR 9-4260. A

TV, 1955 21″ table model and table, 3 mos. old, cost $269.95, ROTISSERIE, used 4 times, cost $49.95, electric OVEN, all for $150 cash. H. WILLIFORD. Write to Northrop News, Box 611. A

BUMPER GUARDS for Ford V-8 '33-36, used, cost $5, $3. E. H. RUSA, OS 5-2852. A

HOUSE TRAILER 36′ 2-bdrm, lived in 2 yrs., all metal, fully insulated, completely furnished. Cost $5000 new, $2500. JACK VAN ORDEN, LEhigh 9-9276, Anaheim. A

TRAILER, tear drop, butane equipped ice box, lights, sleeps two, also 10′x6′ x6′ tent attachment and adjustable bumper hitch, $175. W. A. SHARP, PL 5-3045, after 4 p.m. or weekends. A

MOTORCYCLE, 1950 Harley, $500. WARD WRIGHT. Write to Northrop News, Box 609. A

PLATFORM ROCKER with ottoman; Coldspot REFRIGERATOR; Wedgewood GAS RANGE; Kenmore wringer type WASHER; DINETTE SET; CHINCHILLA PENS. CARL J. KOPER, OS 5-1400. A

WARDROBE TRUNK, good condition, $10. B. P. BRADY, DA 9-5646. A

CHEVROLET COUPE, 1937, $45; RUGS, 2 9′x12′s, 12′x15′ beautiful Persian half new price. RUDOLPH LISARDI, PL 5-8987. A

GAS HEATER, small, good condition, $5. S. VARGAS. Write to Northrop News, Box 601. A

CHEVROLET, 1940 club coupe convertible, body lowered, $10. SALLY COLDIRON. Write to Northrop News, Box 602. A

RIFLE, .22 Remington Fieldmaster, model 121 pump, cost $79.95, fired less than 50 times, $40. T. E. MILLER. Write to Northrop News, Box 605. A

GUITAR, Gibson, Spanish in hard case, non-electric, cost $237.50, $100. T. E. MILLER. Write to Northrop News, Box 608. A

FORD, 1951, club coupe, $595; '51 MERCURY, best offer. VALERIA GIBSON, DA 9-6728. A

TV console, 17″ Philco, mahogany, $65; STUDIO COUCH, $15; SOFA and cover $15. FLORENCE POYNTER, CL 1-6897, after 5 p.m. A

FOR SALE

PACKARD, '48 custom convertible, overdrive, $175. HAROLD M. SIVULA, CHase 7-5179. A

DOUBLE BED, Hollywood type, with springs almost new, mattress and frame, $25; TV, RCA, 10″ model 8T241, $25; drop leaf KITCHEN TABLE, good condition, $8; GAS HEATER, O'Keefe and Merritt, good condition, 15000 BTU, $10. CHARLES KIESEWETTER, PL 9-3697, after 6 p.m. A

PONTIAC, 1947 standard shift. FA 8-3306. A

TRAILER HOUSE, 1952 Roadmaster 29′, modern, excellent condition, reasonable. DA 4-9167. A

DE SOTO, 1950, custom coupe, automatic transmission, $490. THEODORE CANTOR, FR 9-8757. A

MOTORCYCLE, 1952 Puch 250cc, good shape, needs battery, $150. M. LENK, OS 5-5943. A

BEDROOM SET, 3-piece, blonde, good condition, 1 year old, used four months, $125. JEAN GARZA, DA 6-2567. A

OLDSMOBILE, 1953, Holiday coupe, $1819. J. C. COOPER, VE 8-1355. A

RADIO, National SW54 receiver broadcast and 3 short wave bands up to 30 mc., $25. BILL RICHARDS, PL 5-0614. A

AIRCRAFT ENGINE, C-65, low time SMO, $150. H. G. BROWN, OR 2-8920.

KITCHEN TABLE, extension, yellow top with chrome legs, $12.50. KAROLL SHURTZ, OS 6-0393. A

ROLL-A-WAY BED; MICROSCOPE; TRICYCLE; BABY-TENDA; GARDEN SWING. PL 5-6859. A

TYPEWRITER, portable Smith Corona, like new, used only 5 or 6 times, make offer. PHYLLIS VAN DYKE, OR 4-0480.

REVOLVER, H & R 22 Sportsman target, $25; Gerstner TOOL CHEST, $10; Kodak 35mm CAMERA, 3.5 lens with coupled rangefinder, $30. R. A. REED, OR 1-7458. A

CAMERA, Stereo Realist, 3 dimension, ST 41, and VIEWER, never used, recently won on TV show, retail price over $200. $135. ANGELA SCHULTZ, DA 9-1484. A

CHICK BROODER, electric, 50 chick capacity, large coop, reg. size fryer battery, some feeders, fountains, $25 takes all; Cub Scout UNIFORM, complete, size 10., $5; Girl Scout UNIFORM, size 14, $4.50; Portable SEWING MACHINE CASE, with electric motor, foot control, and all wiring, $18.50. AMOS D. ADAMS, OS 6-1696.

RECORD COLLECTION, about 300 records, jazz, all 78 rpm. Best offer over $50. JIM MAURSETH, HEmlock 4-1212.

AQUARIUM, 7 gal. display model including aerator, filter, temp. control, lights, air pump, 20 tropical fish, $22.50; PARAKEET and CAGE, $2.50. PARKS, OR 7-4996. A

BUICK, 1951, super convertible, Dynaflow, $695. LARRY LEVAU, EX 1-2885. A

HEARING AID, deluxe model transistor, 4 months old, telephone switch, $50. SCOTT CRESSEY JR, EA 2-1707. A

BICYCLE, Schwinn boy's lightweight 26″; BENCH GRINDER; ¼″ electric HAND DRILL. PL 2-9597. A

UTILITY TRAILER, 8′ 2-wheel, $60; BATHINETTE, $5; PLAYPEN, $5; STERILIZER, $3; CAR BED and SEAT combination, $3; Sunbeam IRON, $2; IRONING BOARD, $3; Duncan Phyfe TABLE, 32″x54″, $7. RICHARD A. BROWN, OR 4-2445. A

DINING TABLE, bleached mahogany, modern and upholstered CHAIRS, $45; two ABC automatic WASHERS, one for parts, both $45; ¼″ mahogany PLYWOOD, 3 sheets 4′x8′, $5.50 each; like new ¼ h.p. electric MOTOR, $15. FR 4-3253. A

MOTORCYCLE, Triumph, 1954, $550, Tiger 110. OR 1-7458, before 3:45 p.m.

HOUSE, 2-bedroom, 20′ x 26′ garage, patio, room in garage, $9000. JACK ALLEN, OS 5-1850. A

HOUSE, GI resale, 3-bedroom and 1¾ baths, w/w carpeting, drapes, block fence, house 9 months old, 10 minute drive from Northrop, my equity for $2500. DA 4-9426, after 5 p.m. A

BED-DIVAN, maple ROCKER, 2 END TABLES, 1 coffee TABLE, $75. 20″ TRICYCLE, like new, $15. M. T. BUTLER. OR 7-4447. A

HOLLYWOOD BED, including box springs, mattress, legs, excellent condition, double, $35. J. R. WATSON, PL 4-7410. A

TRUCK, '43 Dodge 1½-ton flat bed, 14′x8′ oak floor, duals, spare wheel and tire, $300. OS 6-6856. A

TRUCK, 1½-ton Ford panel, 1937. Merc. motor. Dual rears, best offer over $50. ROBERT A. BASS, FR 2-0437, 11:00 a.m. to 3 p.m. A

HI-FI CABINET, Karlson type, $22.50. R. T. HOWELL, FR 2-1962. A

DAVENPORT AND CHAIR, good condition, $15. DA 4-6748. A

RANGE, O'Keefe & Merritt table-top, $25; Dinette extension TABLE and 4 CHAIRS; DRESSER, GAS HEATERS, very reasonable. WE 6-4886. A

HARVEST BALL BECKONS—. Engineering ladies, left: Francis Keck, Barbara Proffitt, and Jean Harris extend invitation to Engineering Division Harvest Ball on Saturday, November 19, at Mayflower Ballroom. Ducats are $1.25 per person. Johnny Del Fino's orchestra will provide dancing music. Cocktails from 9 to 10—beverages 35c—dinner service from 7 to 12.

FOR SALE

DRAFTING MACHINE, Bruning, 30-inch arms, with two 18 inch metal scales, $65. GILBERT R. CLARKE, FR 9-5601. A

OUTBOARD MOTOR, 7½ h.p. Elgin, used 20 hours, $70. Five man rubber LIFE RAFT, oars, etc., $35. W. DEDON, EX 4-1982. A

TRUCK, 1946 1½-ton Dodge, long wheel base, motor just overhauled. JOE HUTCHINS, DA 6-7648 or FR 9-7102. A

FREEZER, 14′ Coldspot, approx. 2½ yrs. old., $150; Humming-Bird TRAILER, 1955, 15′, used only twice. Reasonable, quick sale. CHANE A. HENDERSON, PL 4-1590. A

CRIB AND MATTRESS, blonde wood, double drop sides, $20; HIGH CHAIR, blonde, converts into table and chair, $20. EX 8-4007. A

SIMCA, '47 convert. DONAVON SOWERS, OS 5-4756, after 5 p.m. A

BOAT, 14′ outboard Curt-Craft, glassed, 25 h.p. Evinrude, remote controls, one man trailer, bait tank, 2 extra Mich. props. Like new, $850. ED SANTORO, FR 9-6386. A

REFRIGERATOR, 6 ft. 1939 model Westinghouse, good condition, $50 or best offer. C. E. BRADEN, OR 7-5062. A

HOME, 3-bedroom, 1½ baths, 1700′ floor space, sprinklers, block walls, 1 year old, 20′ x 24′ play room, 2-car garage, $18,000. HARRY MARION, 1932-J, Lancaster. A

REFRIGERATOR, Coldspot; DEEP FREEZE, 20 cu. ft.; air COMPRESSOR, 60 gal. tank, Ingersoll-Rand; 4 ft. steel bed LATHE. J. E. DEARING, PL 1-4479, after 5 p.m., weekends. A

WASHER, ABC automatic, as is. $25. OS 6-4522. A

WASHER, Maytag, wringer type, automatic pump, $25; fully automatic Southern Electric DEEP-FRY COOKER, 5½ qt., $12. E. GRIFFIN, OS 6-3862. A

KELVINATOR, 6¾ cu. ft., good running condition, make offer; 70,000 grain Rheem WATER SOFTENER, cost $361, $150. VICTOR GYLSTORFF, OS 5-2478.

LIVING-ROOM SET, two-piece, Kroehler over-stuffed, $30; LAMP TABLE, $3. HARRY J. VAN BREE, NE 5-4595. A

FREEZER, Coolerator chest type, 18.4 cu. ft., quick freeze compartment, like new, $250. H. S. CARRIERE. Write to Northrop News, Box 631. A

CHEVROLET, 1940, 2-door coupe, full race, $250. VE 8-5169, after 5 p.m. A

PUPPIES, German shepherd, AKC registered, 7 weeks old, $50. OR 4-2036. A

AIR RIFLE, .22 cal., Crossman, like new. PL 2-9597. A

REFRIGERATOR, Admiral, 1949 model, good condition, $45. ARTIS JONES, PL 6-6656. A

HOUSE TRAILER 33′ with bath. BETTY JEAN HINES. Write to Northrop News, Box 630. A

CANDY MFG. EQUIPMENT, 2 copper kettles, boxing scales, thermometer, stove, storage boxes, etc. Entire lot reasonable. M. T. NORTHRUP, AX 2-1793. A

HOUSE, 2-bedroom stucco, tile kitchen and bath, 40′x120′ lot, fenced rear yard, single attached garage, close to schools, markets, $9825, with 10% down to GI or 15% down on new FHA to non-vet. E. E. DICKERSON, OS 5-4389. A

AUTOMOBILE PARTS, Merc. manifold and carb. fits '49 and '50 Merc. or Ford, $10; '49-'50 Ford or Merc. starter and generator, both for $10; 1949 Ford rear end, $15; '49-'50 Ford block, complete with heads, never rebored, $10; '49-'50 Ford radiator, $7; 1949 Ford RADIO, $10; Craftsman JIG SAW, vibrator type, $10; TAP & DIE SET, cost $32, used once, $20. C. R. SAMMONS, FR 9-9172. A

MOTOR & TRANSMISSION, Dodge, 1949, complete. Will handle change of owner registration, $60. C. G. KREUTZ, PL 7-1122. A

FOR SALE

VACUUM, Kirby, like new, with attachments; RUG & PAD, 9′x15′, blue leaf pattern. C. JENKS, FR 9-4472. A

BAR, 6 ft., custom upholstery, 3 bar stools, will accept best offer. BOB GENTZ. Write to Northrop News, Box 629. A

PLYMOUTH, '39 coupe, '46 motor, best offer. M. E. WINTERS. Write to Northrop News, Box 628. A

MOBILE RADIO EQUIPMENT, two meters, 6-V, 30-watt transmitter and Gonset converter, good condition, $45. BOB HAYOS, EA 2-1503. A

CONVERTIBLE BOOT, white nylon, plastic ½, '52 or '53 Ford, cost $32, may fit '52 or '53 Mercury, $20. H. L. DICKOVER, EM 1-7073. A

CHEVROLET, 1939, 2-door, $35; SUN VISOR for split windshield cars, $5; 1951 Kaiser ENGINE, TRANS., OVERDRIVE and CLUTCH, complete; car RADIO & ANTENNA, $5; 1937 Cad. ENGINE, make offer; small TRICYCLE. R. L. VANDEVEER, OR 2-7359.

HI-FI AMP. Magnatone, 30 watt, base and treble boost, model PISN Jenson 15″ speaker and 8″ Jenson with built-in cross over, $125; double-neck fender STEEL GUITAR, $100; deluxe 24″ Monarch boys' BICYCLE, cost $69.50, $30, or make offer. S. BARNES, FR 9-1771.

MERCURY, 1950, $600. BARBARA PETTIT, DA 9-1592. A

HORSES, Palomino mare, 7 yrs, a man's horse only, Sorrel mare, 8 yrs, gentle for children or beginners. $125 each. J. W. STATLEY. Write to Northrop News, Box 626. A

DOG HOUSE, large, $10; SALENIUM RECTIFIER, 25 amp. plus many other misc. electro-plating equipment including copper anodes. $100. E. A. HUBACEK. Write to Northrop News, Box 625. A

STUDEBAKER CHAMPION, 1940, with 1947 motor, $50; HENRY J, 1951, $295. W. P. CLOTT, DA 9-6923. A

HOME, 3-bedroom, corner, new district, partly furnished, block wall, $14,950; 14′ HOUSE TRAILER, used twice, new awning, $850; TWIN BED, complete, $25; child's TRICYCLE, $7. PL 5-6610. A

SPANISH GUITAR; TYPEWRITER; Tenor GUITAR; VIOLIN; garage DOOR SPRINGS; CARPET SWEEPER. J. H. BUSH, OS 6-6449. A

PLYMOUTH, 1941 business coupe, $80. R. T. HOWELL, FR 2-1962. A

BOAT, 14′, 62″ beam, mahogany windshield, shatter-proof tinted glass, compass, 25 h.p. Evinrude motor, forward, reverse, neutral, controls, boat trailer, $850 cash. C. M. (Pete) JORDAN. Write Northrop News, Box 623. A

BOXER, thoro-bred male, 11 mos. old, $75. A. H. MOORE, DAvis 4-5774, after 4:30 p.m. A

LUGGAGE TRAILER, 4x7′, $25; TIRE REGROOVER, Pico automatic; 2 600x16 TIRES, perfect. A. A. BEYER, OR 7-3922.

TIRES, 1 set of 4 Goodyear Super Cushion, 7.10 x 15, almost new, sacrifice. B. E. TANNER, HEmlock 6-0114. A

HOUSE, 5½ miles from Plant I, 2-bedroom, hardwood floors, fenced 50′x 132′ lot, patio. Full price $9500. FR 4-4282, after 5:00 p.m. and weekends.

CHEVROLET, 1950 club coupe, nosed, decked, custom grille, lowered, best offer. GENE M. FULLER. Write to Northrop News, Box 622. A

CHEVROLET, 1952, 2-door, $800. ELLEN WISE, OR 1-4254. A

HOUSEHOLD FURNISHINGS, miscellaneous, bedroom, living room, etc. PAT CARLBERG, OS 5-5064. A

FOR SALE

REFRIGERATOR, Norge, $60; Gaffers & Sattler STOVE, with griddle, $75; Norge wringer WASHER, $15; all for $130. H. F. FOSTER, FR 9-7490, after 5:00 p.m. A

TRAIN, Lionel "O" gauge electronic control, extra track and accessories, cost $120, $75; DRUM, Slingerland marching, cost $34, $19; DOG HOUSE, $4.50; CLOTHES, boy's shirts, jackets #12-14, slacks waist 24″. Girls red coat, dresses #4, Teenagers skirts 23-25″ waist, sweaters 12, waists 12 and 13, dresses 11, 13, 14½. Mostly under $1. R. L. FUNKHOUSER, FR 5-4763. A

JIG SAW, Craftsman, 24″ throat, with motor and roll-a-way stand, $25; studio photo FLOOD LIGHTS, 2 reflectors on stands, hand-held type, 15 bulbs, $15; AVIARY EQUIPMENT, nest boxes, feed hoppers, water founts, individual breeder cages, wire; mated pair rare BUDGIES, will produce true albinos; PARAKEETS, choice breeders, all colors, rares and normals, closing out hobby, priced to sell. E. B. GUNTHER, OR 7-1401. A

HOME, two bedroom and panelled den, fireplace, drapes, brick patio, fenced yard, view. OR 2-3547. A

PIANO ACCORDION, $800 value, 120 bass, 7 treble, 2 bass switches, fully automatic, case, $275. PL 8-7750. A

CHEVROLET '52 Deluxe 4-dr, $925. KEN BEYER, OR 7-3922. A

BABY BED, complete with springs and mattress, good condition, $8. CHARLES LYONS. Write to Northrop News, Box 620. A

GOLF OUTFIT, set Spalding Top Flight irons, 2 to 10, set (4) Wilson Staff Model woods, one putter, golf cart, one bag of practice balls, all clubs pro model, like new, $120. MARY BETTY BURCH, OS 5-3435, message. A

HOUSE TRAILER, 28′ Eastern built, 1953, extras, $2200. G. B. CLISBY, OR 4-1403.

PROJECTOR, 16mm sound, Bell & Howell, screen, extras, $400; EXPOSURE METER, Norwood Director, sphere and grid for Cine and still, $20. C. M. OLSON, OS 5-6500. A

RECORDS, Beethoven's complete string quartets, 15 new 12″ L.P.'s, $25. DONALD MORRIS. Write to Northrop News, Box 619. A

MOTORCYCLE, '41 Harley 45, rebuilt gearbox, needs paint and cleaning up, $125. DA 4-5601, after 4:00 p.m. A

MERCURY, '52, hardtop coupe, $1050. BOB WAITE, FA 8-6523. A

BENCH SAW, 10″ Craftsman, $75; 2-wheel Craftsman BAND SAW, $65; ¾ h.p. MOTORS, all like new; Bendix Duomatic. WASHER-DRIER COMBINATION, electric, like new, $375. ROBERT F. WILHELM. DA 9-7143.

WATER SOFTENER, large, Consolidated, good condition, two years old, cost $395, $185. RICHARD A. SMITH, FR 4-3816. A

COAT, black Persian Lamb, never worn, ¾ size, size 14-16, $175; Bolex 8mm MOVIE CAMERA. German Schneider lens; Bolex PROJECTOR, like new, $69.95 each; one DRESS FORM, Acme adjustable, size 18, $7. L. M. WACO, GL 4-4359. A

PUPPIES, pure bred Boston Terrier, 9 weeks old, $35, males; male BOSTON, 3 years old, $30. LOUIS R. BOYD, PL 5-5001. A

CLARINET, B-flat, like new condition, deluxe case, $60. ROY WOOD, OR 2-1205. A

TRAILER, 1941 15′, completely furnished, sleeps four, $200; RANGE, O'Keefe and Merritt 36″, grill center top, good condition, $75. H. S. SAMUELS, TO 1-4260.

(Continued on Page 6)

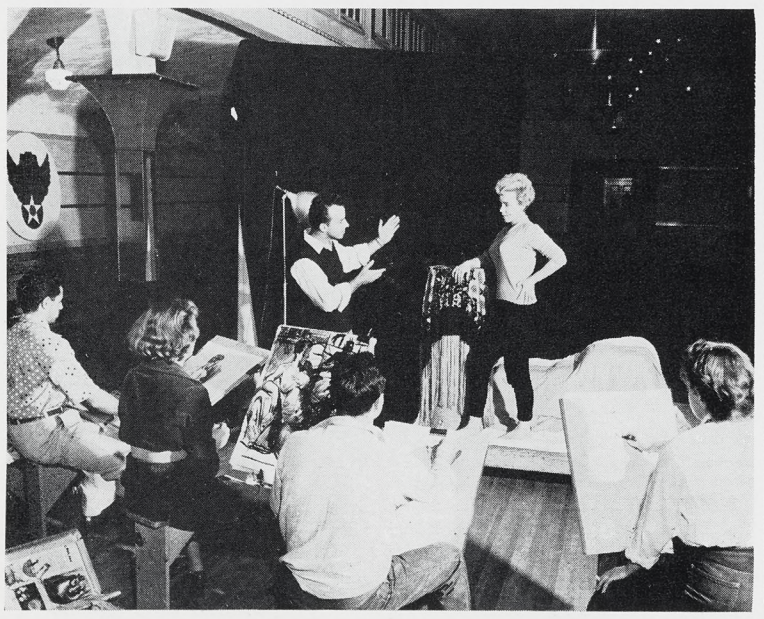
NRC STORY TOLD

NRC ANNUAL EVENTS—One of many events sponsored by the NRC is the Palladium Private Party held yearly just prior to the Christmas holidays. Pictured are dancers at last year's party. Other annual events include the NRC Christmas Party for Juniors, the Doll Dressing contest, NRC Purchase Prize Art Exhibit. In addition are many annual sports events and contests held by various NRC clubs and activities. NRC also sponsors many department parties.

SPORTS—A highly varied sports program is big part of NRC activity. Golfers Louve McCabe and Louie Baker, of Muroc facility NRC are pictured during tourney at Apple Valley course. (See story this page for other activities.)

NRC PREXIES DOWN THE YEARS

Tom Whitbread
John Breneman
Jim McGuire
Lou Baker
Ed Sellon
Roy Wolford
Jim Celoni
Bill Robusch
Ash Dunning
George Metzger
Alex Morrison
Joe Cribbs
Joe Carver
Hal Hunsberger



ARTISTS — Among the clubs of the NRC listed in the cultural category are the NRC Art clubs and the Mixed Chorus groups. Here Art Club Commissioner Joe Kalina poses model for art group.

The colorful orange and blue NRC emblem—a familar sight to all Norcrafters—is the symbol of a unique organization.

Formally the Northrop Recreation Club, the NRC is an organization conceived by Norcrafters to join together in an after-work recreational pattern of their own choosing.

Every Norcrafter is a member of the NRC. He is automatically included in the membership list on his first day of employment. In addition, members of the Norcrafter's immediate family become associate members of the Club.

There are no membership dues in connection with the NRC. Membership in the Club is free to all Norcrafters and their families.

The activity roster of the Northrop Recreation Club includes almost everything from Archery to Weight Lifting, with activities appealing to widely varied recreational tastes.

Each issue of the Northrop News carries an NRC Good Time Table on the sports page with an up-to-date listing of current clubs and activities and meeting dates for each. Each of the outlying facilities has a slightly varied listing of clubs and activities. Norcrafters in these facilities may contact their Personnel Activities office for club listings and meeting dates.

Basically the format of the Club can be broken into four separate categories: sports, educational, cultural, and social.

Sports include basketball, boat club, bowling, golf, gun clubs, skating, skeet, ski, skin diving, sports car club, surf fishing, and weight lifting. Some of the outlying facilities have added badminton, archery, horseshoes and table tennis to the list.

In the educational category are listed the affiliated Toastmasters and Toastmistress clubs, the Bible Study Groups, the camera clubs, Gem and Mineral club, Radio club, the Tropical Fish club, Interior Decorating, Philatelic, Model Airplane, and Model Railroad.

On the cultural side of the ledger are the Art clubs and the Mixed Chorus group.

For those Norcrafters who enjoy social get-togethers there is the Square Dance club, the Women's Dinner club, the Bridge club, and the Chess club.

Especially for junior Norcrafters are the Sea Scouts and the Mariners (Senior Girl Scout Troop).

The list of active clubs within the NRC varies from time to time to keep pace with changing interests and hobbies of Norcrafters. Any Norcrafter with a hobby not included in the current club listings is invited to contact his Personnel Activities office. Here, competent recreational directors will assist him in

HAL HUNSBERGER
NRC President

determining the number of Norcrafters who would be interested in joining such a club and the possibility of adding the club to the NRC roster (i.e. facilities and equipment available and financial advisability).

As the official club song, written by Hal Chanslor, suggests—"Lend your leisure to the NRC".

The NRC has its own officers—elected annually by members of the NRC council, which is composed of commissioners and representatives of the various clubs within the NRC. The activities of the NRC are administrated by the Personnel Activities offices at all plants and facilities in coordination with the officers of the NRC.

The Club has its own bank account—monies are derived from the sale of cigarettes, coffee, candy, and soft drinks from the many vending machines located throughout the plants—and most of the club expenses are paid out of the club account with the company lending a helping hand in the provision of club house facilities and recreation areas.

TOM SCHOTT
VP El Segundo

GEORGE HANNA
VP Ontario

JOHN O'CONNOR
VP Muroc

GEORGE E. MILLER
VP Florida

CHRIS CHRISTIAN
VP Anaheim

THE NRC IS SOCIAL—. In addition to several social clubs on the NRC roster a large variety of social programs and parties are sponsored by the club at all plants and facilities. Here Anaheim division Norcrafters dance at NRC Luau.

AN EDUCATION—Many NRC clubs contain an education theme whereby Norcrafters may learn more about a hobby or activity. Here Toastmistress Rona Jefferson delivers speech at TM Club meet.

NRC MARKS ACTIVE 15-YEAR GROWTH

Let's turn back the NRC clock—!

On all sides Norcrafters are clamoring "How about a baseball team?" ..."How about bowling?" ..."Can't we get a gang together and go horseback riding?" . . . and so your editor decided to investigate and this is what we discovered. One group is already getting the bowlers rounded up for a get-together, another group is talking softball.

To our question "What sports are you interested in?" came back the reply, "Anything . . . when do we start?"

The foregoing was a hot news item just 15 years ago. It constituted one of the main stories in the "Aircrafter", first Northrop industrial publication, Volume I, Number I, dated March 1940!

That is how the NRC was started. The outstanding success of the first meeting was related in later issues.

By April 20, 1940, the Northrop Recreation Club was formally launched. Club officers were elected. Thomas Whitbread was the first NRC president, John Breneman was vice-president, and John Sheehan was elected treasurer.

During the first year of operation the NRC baseball team, the Bombers, won the State Championship; the Club sponsored four dances and two picnics and the club roster listed the following active clubs: Archery, Badminton, Basketball, Bowling, Boxing, Golf, Checkers, Horse Shoes, Camera, Volley Ball, Hand Ball, Wrestling, Tennis, Weight lifting, Soccer, Fishing, Rifle and Pistol, Skating, Ice Hockey, Flying, Softball, Drama, Skiing, Touch Football. The NRC had an orchestra and 1940 was the first year for the popular NRC Christmas Party for juniors.

A brief look at the calendar since 1940 lists many NRC highlights.

1941-1943—Mobile stage show unit forms, devoted to entertainment of servicemen.

1944—NRC Victory Mardi Gras draws star attractions such as Gary Cooper, Lucille Ball.

1945—NRC wins Helms Athletic Foundation Award for "noteworthy contributions to sports . . ."

NRC sponsors NRC Sixth War Loan premiere—admission price one war bond.

1946—Lunch Box Follies initiated.

1947—First new member to NRC "family", Muroc (Edwards AF Base) becomes new NRC facility.

1949—Northrop's 10-year anniversary. NRC has big hand in planning.

1951—Second addition to "family", Ontario starts NRC facility.

1952—It's twins this year! Anaheim and Florida join NRC family group.

1953—New NRC Clubhouse at Hawthorne officially opens.

1954—Palmdale signs name to list of NRC facilities.

1955—El Segundo NRC facility born.

Palmdale NRC Clubhouse opened.

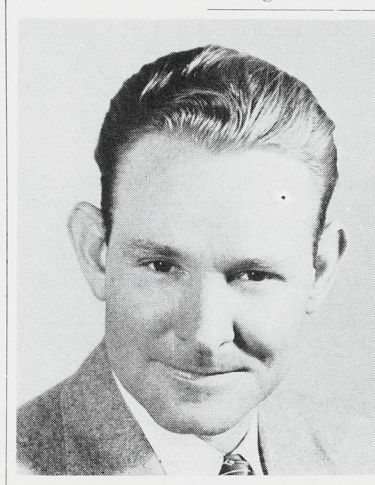
Many things have changed since that first meeting in 1940, but the basic concept of a recreation club by Norcrafters and for Norcrafters has remained the absolute same.

Recreation is a necessary habit—and a good one.

MARSHALL McCAIN
VP Palmdale

WALT DeVORE
VP Hawthorne

MAY HAWKINS
Secretary



GENE BOGGESS
Treasurer

BOYD CORWIN
Sergeant at Arms

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)

SANTA BARBARA & WESTERN, Los Angeles. (1 rider on Western or can go 8th Ave. & Crenshaw from Manchester). P. F. WALLMAN (5504-21446, Ext. 1424). AX 3-2670 at 6 p.m. only.

7:30 a.m. — 4:15 p.m.

(Zone 4)

FIRESTONE & LAKEWOOD BLVD., Norwalk. MARVIN STERN (3554-39768, Ext. 2501). TO 4-5576. 13-4

(Zone 5)

LINCOLN & MAGNOLIA, Anaheim. (Desire two more members in car pool, meet at Lincoln & Magnolia). JOHN O'LEARY (9320-27710, Ext. 2151). JAckson 7-1041. 13-5

3:45 p.m. — 12:15 a.m.

(Zone 3)

ONTARIO. (I drive on Imperial Highway to LaBrea on thru South Gate, Lynwood, Norwalk & La Brea). BERT M. ABRIL (5515-11408, Ext. 1870). 16-3

(Zone 4)

ROSECRANS & IMPERIAL, Norwalk. OTTO L. EBNER (5411-17439, Ext. 1491). TO 3-9542. 16-4

(Zone 6)

WARDLOW & MAGNOLIA, Long Beach. (Freeway, Del Amo, Wilmington Ave., Artesia to Crenshaw). BEVERLY F. JONES (5351-41419, Ext. 541). GA 7-1324. 16 6

4:45 p.m. — 1:15 a.m.

(Zone 10)

ROSECRANS & SEPULVEDA, Manhattan Beach. (Two riders). RAY GRISH (5223-15345, Ext. 528). FR 2-4673. 18-10

12:15 a.m. — 7:15 a.m.

(Zone 5)

COMPTON AVE. & WILMINGTON ST., Compton. JOHN H. HERMANN (5501-40265, Ext. 2200). NE 8-1372. 19-5

(Miscellaneous—Split Shift)

(Zone 5)

LAKEWOOD & BELLFLOWER BLVDS., Long Beach (8). (Route: Del Amo, Wilmington, Victoria, Vermont, El Segundo or Bellflower, Rosecrans, Crenshaw. Take 3 or 4 riders. Hours: 4:15 p.m. to 12:45 a.m. or can wait until 1:15 a.m.). DAVID L. MILLER (9330-40458, Ext. 2228). GArfield 9-2183. 20-5

Rides Wanted

7:00 a.m. — 3:45 p.m.

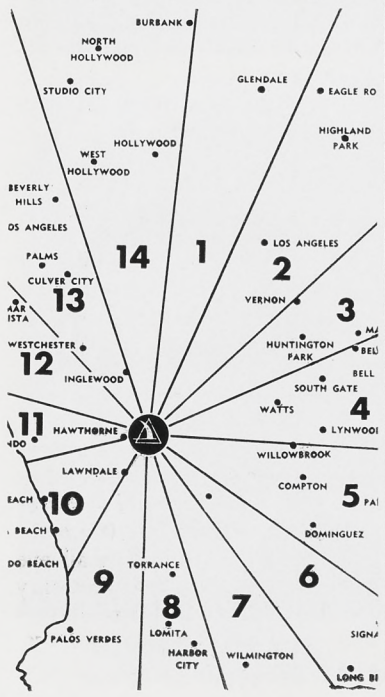
(Zone 2)

CENTRAL & 29TH, Los Angeles, WILLIAM L. WOODS (5503-45, Ext. 2432). AD 2-0778. 2-2

(Zone 3)

SAN PEDRO & 99TH, Los Angeles (3). GAYLORD WILLIAMS (5515-23343, Ext. 1825). PL 6-8529. 2-3

Zone Map



RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 4)

VERMONT AVE. & 108TH ST., Los Angeles. LILLIAN DADE ELSTERMAN (5508-35615, Ext. 2755). PL 4-4297. 2-4

GARFIELD & MAIN, Hollydale. DAN H. KRUCKEBERG (5524-20800, Ext. 2209). ME 0-1110. 2-4

VALLEYVIEW & IMPERIAL HWY., Whittier. (Will either go by way of Rosecrans or Imperial Hwy. Cor pool considered). J. ZERILLI (5621-40115, Ext. 1852).

IMPERIAL & CENTRAL, Los Angeles (1). (I would like a ride from the corner of E. 105th St. & Central Ave. to plant or I would join a car pool). GUS HOLT (5501-141548 Ext. 2200). LU 8-8524.

(Zone 5)

CARSON & ORANGE, Long Beach (7) G. J. GRUMMER (5161-14909, Ext. 2071). GA 7-4370. 2-5

(Zone 8)

REDONDO BEACH BLVD. & 168TH ST., Torrance. (Between Prairie and Crenshaw on Yukon & 168th St.). ROGER WILLIS RITTMILLER (5586-41130, Ext. 1973). DA 9-6820. 2-8

WESTERN & 262ND, Lomita. EDNA BARKER (5583-21788, Ext. 2097). DA 6-6549. 2-8

(Zone 10)

INGLEWOOD AVE. & 137TH ST., Hawthorne. E. FRED CAMPBELL JR. (5516-41146, Ext. 533). OS 5-4259. 2-10

REDONDO BEACH BLVD. & FIRMONA, No. Redondo (Would just like ride home). TINA BLYTHE (5232-15590, Ext. 2181, 2481). FR 9-2122. 2-10

REDONDO ST. & 10TH, Manhattan Beach. (This is near Manhattan Beach Blvd. & Aviation Blvd). W. J. PINKELMAN (5340-16734, Ext. 1641). FR 2-7390.

REDONDO BEACH BLVD & AVIATION BLVD., Manhattan Beach. (Can meet at Ruhland and Aviation). LOIS MATHEWS (5534-21285, Ext. 2244). FR 9-9161.

(Zone 11)

ANZA & 117TH ST., Hawthorne. R. A. COREY (5501-40842, Ext. 2200). OS 6-5786. 2-11

(Zone 12)

CHERRY AVE. & IMPERIAL HWY., Inglewood. M. C. EMERSON (5504-37440, Ext. 1424). 2-12

IMPERIAL HIGHWAY & INGLEWOOD AVE., Hawthorne. (Ride home only). MARILYN CORSETTI (5352-35207, Ext. 1607). OS 6-4192. 2-12

(Zone 13)

LA BREA & QUEEN, Inglewood. NANCY JENNO (1422-37294, Ext. 696). OR 4-3064. 2-13

(Zone 14)

RIVERSIDE DR. & COLFAX AVE., No. Hollywood. W. L. EGGLESTON (5587-22892, Ext. 2750). 2-14

PRAIRIE & 102ND, Inglewood. ED C. DeBACA (5503-41174, Ext. 2431). 2-14

7:30 a.m. — 4:15 p.m.

(Zone 2)

CRENSHAW & IMPERIAL HWY., Inglewood. THERESA PITIAK (7000-41425, Ext. 530). OR 8-7445. 3-2

(Zone 3)

NORMANDIE & 111TH PL., Los Angeles. EVELYN NEWELL (5128-35155, Ext. 1929, 1961). PL 5-1273. 3-3

BETWEEN AVALON & CENTRAL on E. 50th, Los Angeles (11). JOHN H. COLEMAN (6457-39145. Ext. 1709). AD 4-7888.

(Zone 4)

IMPERIAL & VERMONT, Los Angeles. M. E. FOST (5100-14218, Ext. 469, 2358). PL 6-4736. 3-4

FLORENCE AVE. & OLD RIVER SCHOOL RD., Downey, BEAL J. THOMAS (3533-31256, Ext. 2148, 2509). TO 2-8669. 3-4

FIRESTONE & LAKEWOOD BLVD., Norwalk. MARVIN STERN (3554-39768. Ext. 2501) TO 4-5576.

(Zone 5)

LINCOLN & MAGNOLIA, Anaheim. (Desire two more members in car pool, meet at Lincoln & Magnolia). JOHN O'LEARY (9320-27710, Ext. 2151). JAckson 7-1041. 3-5

NORMANDIE AVE. & EL SEGUNDO BLVD., Los Angeles. (Would like to be picked up on corner of 126th St. and Denker). VIOLA SMART (3142-40426, Ext. 2021-2022). PL 4-7704. 3-5

(Zone 6)

REDONDO BEACH BLVD. & VERMONT, Gardena. SHIRLEY MOBLEY (1421-12179. Ext. 691). 3-6

(Zone 7)

DENKER & 182ND, Gardena. ADDIE WILLIAMS (5262-34260. Ext. 2541-1788). DA 4-0202. 3-7

BBSF CLASSIFIEDS

(Continued from Page 3)

FOR SALE

CHROME SET, formica table, oak-like finish, 4 chairs, chartreuse, $40; mahoagany Winthrop SECRETARY, claw feet, four drawers, $75; two mahogany STEP-TABLES, on casters, $15 each. PAULINE BRODERICK, NE 1-9435. A

GAS RANGE, 36" O'Keefe and Merritt chrome top and griddle; 9 ft. Norge REFRIGERATOR. $80 each or best offer; CHEVROLET, '37, 2-door, $50. F. F. DAMMAN, TO 7-0593. A

TRAILER, 2-wheel box with hitch, good condition, $20. RUBY DE SMET, OS 5-6022. A

WALL TELEPHONE, antique, $12.50. F. B. JACOBSON, TO 2-5983. A

GMW

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 9)

MADISON AVE. & 226TH ST., Torrance. (Prefer ride but will consider car pool. Madison & 226th St. are near Hawthorne & Sepulveda Blvds.). RALPH CARRETTA JR. (3551- 34450, Ext. 1420, 1428). DA 6-1985. 3-9

(Zone 12)

MANCHESTER & LINCOLN, Los Angeles (45). (Willing to share ride in car pool.) RICHARD A. BROWN (3350-30528, Ext. 2781, 2782, 2783). OR 4-2445. 3-12

(Zone 13)

HAWTHORNE BLVD. & CENTURY, Inglewood. JEAN ECONOMAKOS (1421-12207. Ext. 2435). OR 1-4361. 3-13

7:30 a.m. — 5:15 p.m.

(Zone 9)

CAMINO DE LAS COLINAS & HIGHWAY 101, Torrance. (Prefer to ride, but can drive on occasions if necessary). HOWARD F. DOSTAL (3360-33886, Ext. 1506. 1889). EX 6-0602.

(Zone 12)

RAMONA & 118TH or 118th & Hawthorne Blvd., Hawthorne. Mornings only acceptable. ELIZABETH A. ROBINSON (1810-41439. Ext. 2025). OS 6-5620. 4-12

(Zone 13)

ROBERTSON & NATIONAL BLVDS. (Car pool considered). MARVIN KORSHAK (3000-41005, Ext. 716). 4-13

(Zone 14)

PICO & NORTON, Los Angeles. Y. L. YEE (3310-41379, Ext. 421). RE 4-1628. 4-14

8:00 a.m. — 4:45 p.m.

(Zone 8)

CRENSHAW & COMPTON, Gardena. PATT RILEY (8310-41390, Ext. 2404). 5-8

3:45 p.m. — 12:15 a.m.

(Zone 8)

COMPTON & CRENSHAW, Lawndale. PEGGY J. WISSLER (5520-13369, Ext. 2646). OS 5-7316. 6-8

(Zone 11)

AVIATION & IMPERIAL HIGHWAY, Inglewood. DE LAYNE PITRA (5516-41276, Ext. 2745). OS 6-8844. 6-11

(Zone 12)

CENTINELLA & VENICE BLVD. J. B. BARTHOLOMEW (5515-41299, Ext. 2279).

4:45 p.m. — 1:15 a.m.

(Zone 10)

FLOURNEY & ROSECRANS, Manhattan Beach. W. H. PATTERSON (5503-36466, Ext. 2681). FR 9-4859. 8-10

MONTEREY & 2ND or Hermosa Ave. & 2nd, Hermosa Beach. W. A. BIEHLER, (5374-47, Ext. 2094). FR 2-9598. 8-10

(Zone 13)

CENTINELA AVE. AT LA BREA AVE., Inglewood. JERRY SWEET (5502-39388, Ext. 2741). OR 2-5363. 8-13

Miscellaneous (Split Shifts)

(Zone 1)

CRENSHAW & MANCHESTER BLVDS., Inglewood. (Mariposa: Hours 4 p.m. to 12:30 a.m.). KAY LAM (6270-25514, Ext. 631). PL 5-0752. 10-1

(Zone 8)

PENNSYLVANIA & HIGHWAY 101, Lomita. (Need ride bad! Hours: 6:45 a.m.-3:30 p.m. or 7:15 a.m.-4:00 p.m., Mariposa). CHARLOTTE R. WARREN (6710-41000, Ext. 3-1232). 10-8

OLD SEPULVEDA & HAWTHORNE BLVD., Torrance. (Hours: 7:15 a.m. to 4:00 p.m., Mariposa). TIPPY FARASH (9320-27707, Ext. 487 or 488). 10-8

(Zone 10)

RAMONA & 134TH or INGLEWOOD AVE., Hawthorne. (Hours: 4:15 p.m. to 12:45 a.m.). RUBY F. LEWIS (5930-18, Ext. 2488). OS 6-2959. 10-10

(Zone 13)

LA CIENEGA BOULEVARD & 18TH ST., Los Angeles. (Home is between Airdrome and 18th, and I would be willing to ride with Northrop employee whose hours are 7:15 to 4:15. Alvira Street is one (1) short block East of La Cienega Blvd. Hours: 7:30 a.m. to 4:00 p.m.). FERN C. MUTH (Air Force, Ext. 1923 or 1924). WE 9-4859. 10-13

FOR SALE

BUICK, 1954 Century, Dyna-flow, 4-door, will accept best offer. DA 6-7668.

DAVENPORT and CHAIR, $10; Innerspring MATTRESS, double size, $10; coffee TABLE, 2 LAMP TABLES, almost new, mahogany, $50 for 3 or sell separately. MAX STERN, DA 4-6748. A

RUG, 9'x15' broadloom, with pad, Aldon make, antique ivory, cut pile weave, cost $140, $89. H. F. DOSTAL, EX 6-0602. A

FRIGIDAIRE, 7 cu. ft. $35; apartment size GAS STOVE, $40, 10 months old; kitchen TABLE and 4 CHAIRS, $20; matching COUCH & CHAIR, corner TABLE, END TABLE, $100, 10 months old; 1953 automatic Westinghouse LAUNDROMAT, $35; half-size BED, $5. J. J. GREENE. Write to Northrop News, Box 617. A

STUDEBAKER, '52 Champion convertible, Overdrive, $500. FR 5-7279. A

FORD, 1953 Victoria. Fordo-matic, $1595; CONTINENTAL KIT for spare tire and wheel, fits 1952, to 1954 Ford, $25; FOG LIGHT for center of grill, fits 1949-50 Ford, $5. W. E. PEITHMAN, DA 4-0930. A

REFRIGERATOR, G.E., $75. JOYCE EBY DA 9-7176. A

FORD, model "A" sedan, OR 2-3253. A

RADIO-PHONOGRAPH, console, Sonora, blonde mahogany, recently installed Webcor 3-speed changer, 12" speaker $100, or best offer. R. A. SANDERS, OS 6-8336. A

COATS, beige, full length, size 18, worn twice, cost $49.50. $20; ¾ length white wolf, $50. DA 4-6424. A

PONTIAC, 1948, 4-door deluxe, cheap. OR 4-1301, after 5 p.m. A

NASH, 1949 600, overdrive, $150, cash or $195 terms or make terms; DUAL MANIFOLD CARBURETOR for '49 Chev.; BAR BELLS, 125 lbs.; maple DINING ROOM SET. $30 or make offer. ROBY GENE PADDOCK, DA 9-3119 or OR 2-3744. A

SUIT, man's beige Mohara, size 40-42 clean, good condition, for 5'10" height, $15. OR 4-4032. A

HOUSE, 3-bedroom stucco, 2 years old, redecorated, near school and market. Large lot, brick and flagstone patio-barbecue, West 232nd Place, near Torrance. Full price $9750, will sell for $50 down and $25 per week, or $500 down and $75 per month. TE 4-7305, 6-9 p.m. or weekends. A

COCKTAIL RING, unusual setting, 14 kt. 3 emeralds, never worn, value $188, $85. Write to Northrop News, Box 614.

WANTED TO BUY

BABY BATHINETTE, good condition. G. OUWERKERK, OR 2-8238. B

BABY-TENDA and/or PLAY PEN. R. J. ALLEN, Windsor 7-3468. Palmdale. B

CLARINET, used, but in good condition, must be reasonable. OS 6-9671. B

HOUSE, G.I. resale, 3 or 4 bedrooms, plus 2 baths, south Torrance vicinity, approx. $1500 down. G. T. COSTA. Write to Northrop News, Box 604. B

TRACTOR, chain-drive; Lionel "O" gage TRAIN. KEN KLIER, DA 9-5646. B

WELDING TANKS, set of oxygen and acetylene, new or used, large or small. J. H. BEAUCHENE, LO 6-3441. B

BICYCLE, 20", boy's, good paint and tires, for Christmas. M. BOYER, OS 6-3941. B

BICYCLE, 20" boys in good condition. JOHN L. HILL, FR 5-5760. B

BICYCLE, girls' 24", in good condition. TO 2-5983. B

CAMERA, 35mm, also SLIDE PROJECTOR and screen. Write to Northrop News, Box 624. B

TABLE SAW or SHOP SMITH in good condition. S. BARNES, FR 9-1771. B

TYPEWRITER, standard, to $25. L. B. DEBS, DA 6-4425. B

POOL TABLE, 4'x9' or 4½'x9½', must be in good condition. L. N. LARRENTREE, OR 1-4474, after 5 p.m. B

FOR TRADE

TRAIN SET, Lionel electric with extras, for good portable typewriter. OR 2-8851. C

AMPLIFIER, "Hi-Fi" supreme fidelity, trade for transportation car, or what have you? A. FERNANDEZ, AN 3-7620, 6-8 p.m. C

CHEVROLET, old, needs work, trade for green or blue parakeet, that can say "Daddy." Write to Northrop News, Box 615. C

FOR SALE OR TRADE

RIFLE, like new, .22 caliber Winchester automatic; .38 caliber REVOLVER, $50 or trade for portable electric or table saw. D. I. QUINLAN, FR. 5-3149 after 4:30 P.M.

CAMERA, 35 MM Nikon with 1.4 Nikkor lens and case, reg. $369, $150 or trade for 4x5 II Omega enlarger with lens. V. J. CORSO, OS. 5-5193.

FOR SALE OR TRADE

FURNITURE, 3-rooms, includes Crosley refrigerator, chrome-top Gaffers & Sattler stove, living room set, lamps, end tables, dinette set, bedroom set, vacuum cleaner - tank type, and engagement ring thrown in, $700. BILL PILCHMAN. Write to Northrop News, Box 632.

FORD, 1951 4-door sedan 6 cyl. $400 or best offer. J. CONNER, Write to Northrop News, Box 610.

HORSE, 3 yr. old American saddle bred mare, white gentle, very well trained, has papers; saddle, bridle and horse, $200. WILLIAM SUELL, Write to Northrop News, Box 603.

MODEL "A" 1930 pick-up, '41 Ford motor, hydraulic brakes, $100 or trade for motorcycle. CHARLES GAYLORD, OS. 5-8070.

MOTEL, 8 units, Palm Desert resort, includes membership in Shadow Mountain Club, $15,000 to handle, or trade for 3-bedroom house in Los Angeles area. DON MORE, HO. 5-4037.

PHOTO LAYOUT, complete, includes Crown Graphic 4X5 camera, Graflex flash gun, tripod, Dejur 4X5 enlarger, Lott print dryer, safe lights, spots, boom light, many extras. Make offer or will trade for 15' or 16' walk-in trailer. D. V. BUSENBURG, FR. 5-2756.

HOUSE, new 3-bedroom, on acre, fruit and shade trees, frog tank 3'X3'X30', Palmdale, low down or trade for Inglewood property. EDWARD DeBODE, OR. 7-9943.

TRIPLEX, about 3 years old, one 2-bedroom, two 1-bedroom apartments, disposals laundry-room, garages. 15 min. drive from Northrop, $22,000, income $210 per mo. VERNA M. MUIR, DA. 4-0696.

OLDSMOBILE, 1954 Holiday 98, power equipped, $2900 or trade for new '55 Ford Ranch Wagon of like value and similar equipment. HO. 5-4037.

TV's, 17" Silvertone, $70; 14" Philco, $50, both in excellent condition, will sell only one. S. K. CLARK, OS 5-7030. M

RIFLE, Savage 30.30 cal., like new, trade for good 35m.m. PROJECTOR; SHOPSMITH; POWER MOWER; KODAK VIGILANTI; Silver Fox Fur CAPE; ENCYCLODEIA; man's WRIST WATCH, make offer. DENVER HOWARD, OS 5-5829. M

MOTORCYCLE, Harley W.R. track bike, all racing equip., trade on pickup truck; Triumph GAS TANK, $5; small Universal TANK, $10; Porch SPRING FRAME & REAR WHEELS, $10; B.S.A. 21" FRONT WHEEL & 19" REAR WHEEL, make offer; Triumph CYLINDER & HEAD, 500 C.C., $20. WILBERT T. FERRIS, PL 5-4114. M

WASHING MACHINE, 4 year old Kenmore wringer type semi-automatic, porcelain tub, $35 or trade for good 1 h.p. electric motor or shop tools of equal value. E. J. KIMLING. Write to Northrop News, Box 616. M

VTVM, Hickok, hardly used, to sell, or trade for 8mm movie camera or camera and projector. T. REYNOLDS, VE 8-4918. M

TRAILER HOME, 1955 Expando, 30', opens to 14½' wide, 2-bedrooms, full bath, fully furnished, sell or trade equity for lighter trailer to sleep four. ROBERT B. HUGHES, Write to Northrop News, Box 627. M

OLDSMOBILE, 1954 2-door, will trade for '54 or '55 Porsche coupe or sell for $2050. OR. 2-8980.

MODEL AIRPLANE; T.D. 1, flown once, cost $19.50, $12; 10 pints Thimble Drome RACING FUEL, $7; .074 model AIRPLANE MOTOR w/Glo Plug, prop, $4. Trade for telescope, or all for $20. JIMMY HERMAN, NE 8-1372. A

FREE (To be given away)

KITTENS, part Persian, 7 weeks old. Need good homes. AMOS D. ADAMS, OS. 6-1696. D

RENTALS OFFERED

ROOM, private home, side entrance, connecting bath, $8 per week. RONALD SCHOONMAKER, PL 9-3695. E

APARTMENTS, new 1 and 2 bedroom unfurnished, thermo heat, garbage disposal, garage, near Century and Crenshaw, $77.50 and $95. EX 6-6823 or EX 9-5587. E

SHARE HOME, young man, furnished, Westchester, TV, utilities, auto. laundry, fireplace, $40 month. A. MARICK, OR 7-8466. E

APARTMENT, furnished large 2-room, plus kitchen and bath, 2 wallbeds, all utilities paid, small patio, central Redondo Beach, no pets, $75 monthly or $68 on lease. GEO. W. LESHER, FR 2-2418. E

HOUSE, 2-bedroom, nearly complete, available Nov. 15, garbage disposal, plumbing for auto. washer, near schools, market, bus line, no yard work or water bill, one child OK. D. H. EAGLIN, NE 1-7209. E

SHARE HOME, lady to share 3-bedroom, furnished. Morningside Park. PL 4-8289, after 2 p.m. E

(Continued on Page 7)

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
Practice sessions, Gardena High School, every Wednesday evening at 6:45 p.m.

BIBLE STUDY, Roy Stahl
Meet daily, Plant I, east mezzanine conference room, 11:30 a.m.; Plant II, second floor, center conference room, 12:00 p.m.; Plant III, conference room, 11:00; Nash Building, 12:15.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Ralph Vincent

BOWLING (nights), Garland Steiner
Winter leagues now in progress.

BRIDGE CLUB, Walt Darby
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Robert Carberry
Meet every other Friday evening, 7:30 p.m. Next—Nov. 11.

CAMERA CLUB (nights), Gene Beck
Meet every other Saturday, 7:30 p.m. Next—Nov. 12.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF, Andy Titus
Tournament at Alondra, November 20.

GOLF, (nights) Leo Baker
Winter league now forming—Monday mornings.

GUN CLUB (days), Dick Booth
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—Nov. 21.

MIXED CHORUS, Florence Graveline
Meet every Wednesday evening, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Bill Kappele
Meet 1st and 3rd Tuesday of each month at Annex, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Friday after work (1:30 a.m.)—Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—Nov. 12.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING CLUB (nights), Tex Hylton
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays. Beginning class Sunday afternoons from 3:00 to 5:00 p.m.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins
Winter leagues now in progress.

DINNER CLUB, Hazel Stewart
Monthly dinner meetings.

INTERIOR DECORATION
Weekly meetings in lampshade making Thursdays, 7:30 p.m.

SENIOR GIRL SCOUT TROOP (Mariners), May Hawkins
Meet Tuesdays, 7 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Vi Murphy
Meet first, third Thursdays, 7:30 p.m.

SPORTS *The Northrop News*

FLORIDA FETES NEW V-P

HAIL THE VEEP—Newly-elected NRC vice-president at Florida MTF facility is George E. Miller. Pictured during ceremonies at inaugural ball are, left: V. O. Smith, chief, MTF; George; outgoing V-P Ken McCarty; Jack Cushman, supervisor, MTF Industrial Relations. For details of evening, see story, right.

GEORGE MILLER HEADS MTF-NRC

More than two hundred Norcrafters, their families and friends turned out last month to celebrate the inauguration of George E. Miller to the post of Florida NRC vice-president.

The annual Inaugural Ball was held at the Melbourne Country Club at Melbourne.

George served as commissioner of the first MTF bowling league, which opened its highly successful season in the Fall of 1953. He has since been active in many phases of NRC work.

As part of the inauguration ceremonies, Kenneth McCarty, outgoing MTF-NRC vice-president, was presented with a bronze plaque in appreciation of the excellent job he did during the past year. Ken was the "guiding light" for a host of MTF social functions as well as taking an active part in the NRC Glee Club's popular productions of Gilbert and Sullivan's Mikado and H.M.S. Pinafore.

Following the installation ceremonies the Florida NRC Fishing Club came into its share of the limelight with the awarding of fishing trophies.

Trophy winners for the 1954-55 Fishing Club contest were: R. J. Kotowski, Design section, for biggest salt water catch; G. E. Singleton, Flight Control, in the fresh water category; and B. C. Danner, Instrumentation, for deep sea.

NRC Bible, Golf, Art Club Details Revealed

All NRC clubs are extending special invitations to Norcrafters to join them in their club activities. (See pages 4 and 5 of this issue.)

Following are some details of several NRC club activities.

NRC Bible Study clubs meet during various lunch periods throughout the Northrop facilities. The purpose of these groups is to further a knowledge of the Bible for all Norcrafters regardless of religous preference. The discussions and studies are interesting and helpful. Members come from all faiths—Catholic, Protestant, Jewish — and some have no church preference. Meeting times and places are listed in the NRC Good-Time Table.

The NRC Philatelic Club has announced a stamp auction to be held on November 28. The club, which is open to both junior and adult Norcrafters, meets the second and fourth Monday of each month at the Northrop Recreation Club House at 7:00 p.m. The auction is for the purpose of buying, selling, and trading stamps.

Golfers at Hawthorne are preparing for the forthcoming November tournament. The competition will be held at the Alondra Park Golf Course on Sunday, November 20. Merchandise awards will be presented to winners of all flights.

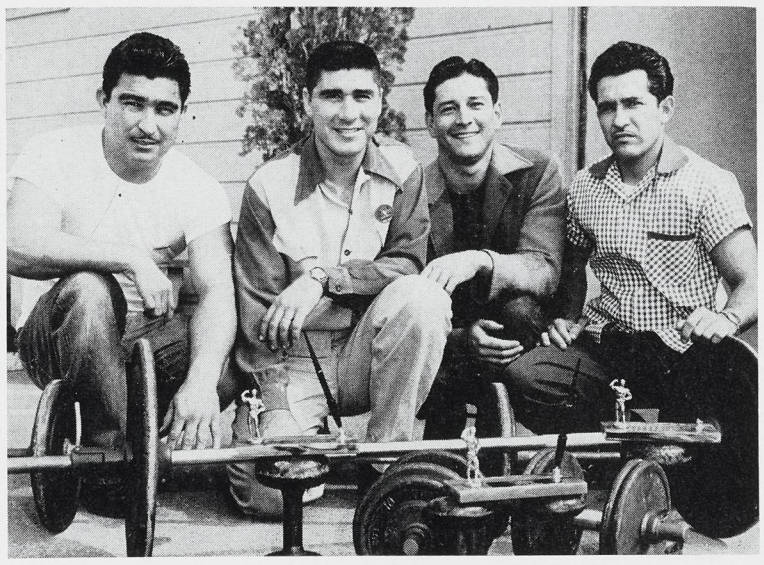
Entries are limited to sixty and entry deadline is Friday, November 11. Tee times have been set from 11:00 a.m. to 12:30 p.m. Greens fee is $2.50, entry fee 50c.

Climax to the year's activities by the NRC Art Club is the annual NRC Purchase Prize Art Exhibit. All Norcrafter artists are invited to submit entries in this event and special invitations are extended to members of Norcrafter families.

The Art Club meets every Thursday evening in the NRC Club House Annex. Art subjects are live models.

On the distaff side—. All lady Norcrafters who bowl are invited to participate in the annual B.U.L. State Singles classic. The first two rounds will be bowled in the bowler's individual league. The winner of the City Roll-off will receive a trophy and fare to San Jose to the State finals.

Personnel Activities or league secretaries have details.

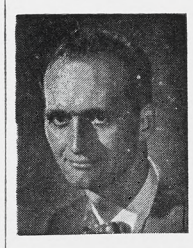


ODD LIFT WINNERS—Strong men of Ontario NRC Weight Lifting club "Odd Lift" contest are pictured left: Armando Lowe, runner-up, light heavy; Joe Brown, winner, light-heavy; Cecil Rubidoux, winner, middle; and Ronald Perez, winner, light. Group took NRC trophies. All Empennage Assembly-Installation.

Boat Club Burgee on World Trip

By HAL HUNSBERGER
President
Northrop Recreation Club

The NRC Boat Club burgee will be seeing some far away places within the next few months. Last month the yacht Scimitar manned by NRC Boat Club members Larry and Cleota Pugsley, Hank Young, and Ed Boden, left San Pedro for a round-the-world cruise.



The Scimitar is a 34-foot steel sloop. Many ingenious lockers were installed on the boat to store gear and food for a long stay at sea.

Present plans are for the sailors to cove-hop to Panama. From there they plan to sail for the Galapagos islands. The Galapagos islands sojourn will last for approximately six months. From there their main ports will be Chile, the Easter Islands, Tahiti, and all the islands on the way to Australia.

After Australia the itinerary — as now planned — reads; Africa, the Mediterranean, Buenos Aires, the West Indies, and home! It will be a long trip and undoubtedly, an exciting one. Boat Club members will be kept posted on the group's progress, and it will be a long posting—the trip should take from five to seven years! Good luck, sailors.

BBSF Classifieds

(Continued from Page 6)

RENTALS OFFERED

HOUSE, 3-bedroom, Gardena, fenced back yard, garage, near public school, children OK, unfurnished, $95 month. CHARLES C. LYONS. Write to Northrop News, Box 606. E

COTTAGE, two-room, furnished, all utilities paid, garage, two miles from Plant I., $50 per month. RICK LAGRAND. Write to Northrop News, Box 607. E

HOUSE, unfurnished 2-bedroom, walking distance of Northrop, $95, 2-car garage, patio, adults only. OS 5-4756.

ROOM, private entrance, next to bath, quiet. Preferably young man. A. RICKERS, OS. 6-1385, after 3:15 p.m.

HOUSE, 3-bedroom, attached garage, fenced back yard, close to grade school, children welcome, $90 month. CHAS. LYONS. Write to Northrop News, Box 621. E

APARTMENT, 1-bdrm., has stove, refrigerator, drapes, rug, etc., Manhattan Beach, pets O.K., $65 per mo. DA 6-7990 or FR 2-8710. E

APARTMENT, Newly finished 3-room, lights & water paid, $65 mo. C. R. (Tex) RHODES. Write to Northrop News, Box 618. E

SHARE APARTMENT—Will share furnished apartment with one girl, Inglewood, near plant. MILLER, OR 2-1884. E

HOUSE, modern, 6 rooms, furnished, 5 min. from Northrop, fenced yard, w/w carpeting, all electrical appliances, owner wants to live in, use 1 room, board with tenant, $100 per mo. GEORGE SANBORN, PL 4-2417, (neighbor). E

RENTALS WANTED

HOUSE OR DUPLEX, on or about 1 December, reliable couple with infant, first-floor 2 or 3 bedroom unfurnished small yard, Inglewood, Westchester or Culver City area, must have good neighborhood, space for automatic washer, living room 12' wide. Pay up to $100. WILLIAM R. HAYMAN, OR. 2-0809.

GARAGE, within radius of 1 or 2 blocks of Plant I, to park car, reasonable. TED SMITH, DA. 6-1268.

CHILD CARE OFFERED

CHILD CARE, night shift, care for children in my home from 4 p.m. 'til 1:30 a.m. 4 blks from Northrop, fenced yard. OS 5-6440.

CHILD CARE OFFERED

CHILD CARE, ages 3 to 10 yrs., near schools, fenced yard, hot lunches, naps, 1 mile from Northrop, day or night shift. OS 5-7993. G

CHILD CARE, day nursery, ages 3 yrs. and up. Close to school, fenced yard, balanced diet, naps if desired, licensed. OS 6-6566. G

CHILD CARE WANTED

CHILD CARE. Want woman near Vermont & Manchester to care for 2 school age girls with a little light housework. Hours 6:30 a.m. until 5 p.m. Children in school from 9 to 3. PL 5-0786. H

PERSONALS

REWARD to person who witnessed accident between prewar car and blue and white 1955 Ford on parking lot "E" Saturday Oct. 15, between the hours of 3:45 and 12:15 a.m. HO 4-7747 around 3 pm.

IN APPRECIATION: I wish to express my thanks to all Norcrafters for the kindness extended to me while recovering from my injuries. ALLEN RICHARDSON.

PIANO wanted to use while storing in Palos Verdes. FR 5-4763. L

ENGINEERS HOLD HARVEST BALL

The Engineering division is going all-out on its semi-formal Harvest Ball to be held on November 19 at the Mayflower Ballroom.

In addition to dancing to the music of Johnny Del Fino's orchestra, guests are invited to attend the cocktail party — beverages 35c — from 9 to 10 p.m.

Dinners will be served all evening, no reservations necessary. Service starts at 7:00 p.m.

Ducats are $1.25 per person and everyone is invited.

THE Northrop Scene BY DAY AND NIGHT

MC Annual Dinner Dance

GUEST SPEAKER at recent Management Club annual dinner-dance was Dr. John F. Victory, executive secretary of NACA. He is shown here, center, between President and Mrs. Whitley C. Collins and Vice-president and Mrs. Edgar Schmued at reception preceding the dinner. The well-attended MC occasion was held in the Embassy Room at the Ambassador.

CONDUCTING dinner-dance meeting was MC President Scotty Smith, shown standing here at table of Mr. and Mrs. H. J. "Bud" Burns. Latter is MC Vice-president for the Palmdale facility. Raffle and entertainment co-featured evening's show, along with Dr. Victory's address describing NACA work.

VENDOR-VENDEE Product Improvement Program of regular conferences recently included visit of 15 vendors to plant. (See story on page one.) Tour of assembly line followed meetings at El Segundo, lunch in Cafeteria, with Marie Allison, left, Public Relations, guiding group. Shown, from left: D. L. Miller, Northrop Materiel; G. R. Steinhoff, of General Controls; Don Axt, Engineering Liaison; and Dan O'Halloran, Quality Control; S. M. Jarvis, Missile Aircraft Engineering Company; Dick Beck, Materiel; H. H. Baribault, General Controls; Victor Dutton, Bohanan Manufacturing Company; Brooks Laurie, Engineering; Art Pearson, Materiel; Bob Catlin, Quality Control; W. J. Hyatt, Adel Precision Products; Leon Freeman, Aer-O-Mat; Bob Gira, Topp Industries; Arch McClintock, Coast Spar Milling; Bud Bennett, Quality Control; Carl Hood, Materiel; Ray Berends, Materiel; Jack Lane, Bohanan Manufacturing; and R. C. Forsnas, Forsnas Engineering. Not in the pic, but present for meeting; W. L. Zimmerman, Adel Precision Products; W. A. Cummings, Bertea Products; Jack Hamilton, Menasco Manufacturing Company; Fred Amon, Parker Aircraft; L. A. Myhre, Western Gear Works.

MEETING of vendors preceding plant tour found reps of Quality Control, Materiel, Engineering, and Manufacturing explaining their views. Here Quality Control Director Bob Catlin talks; at his left is Materiel's Dick Beck, at his right, Manufacturing's F. W. "Bob" Lloyd. All meetings aim at closer understanding.

AT ONE OF TABLES reserved by MC members was this group, photographed during lull in festivities. From left: Mrs. John B. Clark; Mr. and Mrs. Joe Payne; Tom and Mrs. McCarthy; Ed Peyronnin; Gid and Mrs. Kelly; Vice-president and Mrs. Kenneth P. Bowen. Annual dinner-dance is highlight of MC year.

CIVIC AWARD came to John W. Young, Missile Assembly, recently from Inglewood for his community services. Plaque given John read: "Presented to John W. Young for meritorious service to our city as a member of the War Memorial Commission." Presentation was made by Major George B. England.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, November 23, 1955

Covering Polar Frontier

ALASKA-BOUND—! Marvin Miles, Los Angeles Times aviation editor, and Larry Sharkey, Times photog, leaving for Alaska from Palmdale Northrop facility to do series of stories on Alaskan air frontier, where Scorpions are particularly active. Shown striding toward flight line: Major J. L. "Jake" Moutier, commanding officer, 433rd FIS; Sharkey and Miles. Rear: Northrop pilots Whitey Van Salter and Bob Love and R. O. John Wallis, Northrop Military Relations.

PRINCIPALS gather before beginning of flight to Alaska. Front: John Wallis, Major Moutier, Marvin Miles. Rear: Bob Love, Whitey Van Salter, Larry Sharkey, Al Cline (director, Northrop Public Relations), Major Mark D. Meranda (chief, USAF Office of Information Services, Los Angeles). Latter helped Public Relations department arrange trip for newsmen.

PRE-FLIGHT BRIEFING scene showed Jack Farley, chief, Production Flight Test (center), talking to Moutier, Love, Van Salter. Times-man Miles rode with Love; Sharkey was observer for Van Salter on the flight.

PLANNING AHEAD

ENGINEERING, PRODUCTION PLANS COORDINATED

In keeping with Northrop policy of modernizing its facilities and equipment to keep pace with the industry, new production machinery is now being installed in the Machine Shop.

This machinery is the forerunner of additional equipment which has been — and is being — purchased by the company as a result of the teamwork planning accomplished through the combined efforts of the Manufacturing Planning Team and Engineering division research teams.

The Manufacturing team, under the chairmanship of Industrial and Plant Engineering, consists of top executive representatives from Production Engineering, Factory, Materiel, Missile Production, and Operations Analysis. Present members include George Chalmers as chairman, and Bob Hall, Jack Hinchliffe, Bob Lloyd, Tom McCarthy, and Mel Riggs as members.

This team translates into production terms and planning the input from Engineering division organizations such as Preliminary Design, headed by Welco Gasich; Engineering Laboratories, under Royal Jackman, chief; and Engineering Producibility, John Van Hamersveld.

The team—in close coordination with design concepts developed by Engineering—is preparing short range, as well as long range, plans in conjunction with Administration's Corporate Planning group, under Ed Petoskey, to continually reduce the cost of manufacturing parts and the flow time from design to finished product.

Long term area re-arrangements are constantly being planned to continue to reduce material handling requirements; to improve the flow of production parts; and to effect reductions in paperwork requirements. (All three programs mentioned will increase further the productivity of the company; all have marked the company's production progress during the past several years).

As a basis for its planning, the Manufacturing Planning Team has been—and is—continually analyzing future manufacturing needs for production of the high speed aircraft of tomorrow, so that present improved equipment and facilities can be quickly, smoothly, and adequately dovetailed from present to future requirements.

Monitoring the Manufacturing Research program is one part of the planning team's operations. The research activity—a Manufacturing division team effort closely meshed with the Engineering division's efforts—draws its skills from specialists in Production Engineering, Manufacturing Engineering Methods, Plant Engineering, Equipment Engineering, Production, and Materiel.

Basic responsibility of this Manufacturing Research team, administered by the monitoring Manufacturing Planning team, is to attack all elements standing in the way of Manufacturing

(Continued on Page 2)

Nolan Tells Work Total At Anaheim

Northrop Aircraft's Anaheim Division has been awarded military defense contracts totaling more than $6,000,000 during the last seven months, R. R. "Dick" Nolan, Northrop-Anaheim manager, has disclosed in a letter to all Anaheim Norcrafters.

He said these contracts cover manufacture of widely-diversified products in the field of optics, armament and fire control for all branches of the armed services.

Among products currently being manufactured by Northrop-Anaheim, Nolan listed aircraft assemblies, guided missile components, panoramic telescope mounts, tow reels, optical plotting boards, periscopes, telescopes and other opto-mechanical devices.

In addition, he complimented plant personnel upon successfully completing multi-million dollar contracts for volume production of T-31 ballistic computers for use in the fire control systems of U. S. Army tanks.

Under this program, the Anaheim plant has manufactured more than 3900 of the opto-mechanical devices. During this project Northrop-Anaheim adhered to the high quality standards set by the Army Ordnance Corps for this product. Without deviating from the precision requirements of the devices, Norcrafters at the division still maintained a high rate of production.

Nolan said Northrop-Anaheim has received a letter of commendation on the production achievements of the plant on the latest computer contract from the Fisher Body Division of General Motors, for whom the computers were produced.

He ended his regular "state of the company" letter to Northrop-Anaheim personnel by saying, "I am very proud of the team spirit which has brought success to this Division and made Northrop such a good place to work."

Inter-division Teamwork Reflected in SAE Meet

Northrop Engineering-production teamwork has been highlighted in panel discussions by Norcrafter participants in the recent aeronautical meeting of the SAE. They drew laudatory remarks from the general chairman of the forum.

In a letter addressed to Vice-president Kenneth P. Bowen, Chairman B. F. Raynes (vice-president of Manufacturing, Rohr Aircraft) expressed his appreciation to the company for the participation of Northrop personnel in the Aircraft Production Forum, which highlighted the golden anniversary meeting.

"I would also like to extend my congratulations to them," Raynes wrote, "for the excellent job they did in presenting the panel topics. We feel that their fine work went a long way toward bringing engineering and production people into closer harmony in solving manufacturing problems."

The theme of the meeting was the emphasis on teamwork between design engineering and manufacturing. It is significant that Northrop production and engineering personnel played a prominent part in the discussions.

A report on F-89Ds has shown that design stabilization—a reflection of close working relationship between Manufacturing and Engineering—resulted in a substantial decrease in maintenance engineering hours per airplane from an initial 5000 hours to approximately 1500. This was a planned reduction of 70 per cent over three contracts' span.

The stabilization factor also showed striking effect on Manufacturing rework figures for the same contracts.

The first D-series contract—with substantial changes being made from the preceding C-series airplanes—required 12.95 per cent rework.

But the figure began a rapid, calculated descent, so that on the second contract it had become 5.65 per cent. Close teamwork and timely planning continued this progress, and the third contract found the percentage lowered to 2.43.

Stability and cooperation have also been mirrored in another facet of Northrop operations — tooling (Tool

(Continued on Page 2)

NRC Private Party

(See Story, Page 5)

Palmdale Section

Expansion Scheduled for Northrop-Palmdale Base

Northrop will break ground in December for expansion of its Production Flight Test installation at Palmdale, Kenneth P. Bowen, Northrop's vice-president of Manufacturing, announced to the press last week. The expanded facilities will be financed by and operated for the U. S. Air Force.

Bowen said new building construction totaling nearly 3500 square feet is scheduled for completion in March, 1956. This will include a new Personnel and Plant Protection office building, a new fire equipment storage station and additions to the existing paint and strip building.

In addition to the new structures, Bowen said concrete and asphalt run-up and aircraft parking areas will be enlarged by 140,000 square feet. Electric power installations and heating and ventilating facilities are also being expanded.

According to Vice-president Bowen, the need for enlargement of present Northrop - Palmdale facilities has been brought about by increased final assembly activity at the intallation.

Largest building in the new addition is a 1600-square foot structure to house Personnel and Plant Protection Norcrafters. It will be air-conditioned and equipped with overhead fluorescent lighting.

A total of seven separate concrete and asphalt slabs will be laid under the improvement program with the largest single area measuring more than 64,000 square feet. Stepped-up electric power will provide additional substations for outside ramp work areas because of more testing requirements on the F-89H.

Northrop's initial facility, totaling more than 250,000 square feet, was completed in March, 1954. Since that date, personnel totals at the plant have increased from 50 to more than 1200.

Final assembly and production flight test of Scorpion F-89 all-weather interceptors for the U. S. Air Force are currently in progress at Northrop-Palmdale. F-89 aircraft are delivered combat-ready from the Palmdale Airport to operational USAF units standing 24-hour guard in the polar regions and other air defense areas.

Palmdale, Muroc Open Competition on Greens

Northrop-Palmdale and Edwards golfers held their first joint tourney on November 12, playing the Saturday round on the brand new Antelope Valley Country Club course. Weather was not up to par, but enthusiasm and success of tournament were great, according to Warren Symington, Palmdale golf commissioner.

Playing "blind bogey" over the 18 holes, low three at the windup were Chuck Lee of Edwards, Ken Wood of Palmdale and Jerry Meyers of Edwards.

The "blind bogey" approach permitted handicaps to be set for each player after the 18 holes of play. Numbers of six holes were drawn from the hat, scores on these holes being the basis for handicaps of all players.

The greater number of sod-busters out for the day were from Edwards.

Names—Chuck Lee, John Birt, Harold Gaylor, Lou Drazin, Louie Baker, Frank Harrison, Mel Lowe, Louie Weltz, Ralph Friesen, Carroll Wheeler, Bud Adams, Carl Silkey, Jerry Meyers, Joe Niessen and Gene Young.

Palmdale would-be hole-in-ones—Sam Ponton, Tom Post, Jud Humphrey, Marvin Schneider, Ken Wood, Ernie Underwood, Chuck Smith, Warren Symington, Bob Legg and Bob Fisher.

It was an early morning journey for the entire crew, with first tee-off at 6:15 a.m.

First tournament's success has both Palmdale and Edwards golfers thinking about a repeat in the near future, with eventual bout between the two facilities also being planned.

Next time around, according to both Symington of Palmdale and Edwards' Frank Harrison, will be a handicap with advantages based on score cards as turned in. Request is for Norcrafters interested in the next tourney to be getting their cards to these two men.

Norcrafters Lend Hand In "Can Do"

"Can Do?"

"Sure, can do!" answers the Palmdale Norcrafter to the query, placing, as he speaks, his own personal can of food atop the growing mountain of similar cans being gathered at the facility for later Christmas distribution to less fortunate families in Antelope Valley.

Can Do is a new approach to the time-old manner of expressing Christmas cheer through helping others. The slogan, thought up by Palmdale personnel, tells its own story.

A can a week is the suggested quota per contributor. First cans began coming in last week, according to Sam Ponton, of Personnel Activities.

Buy U.S. Savings Bonds

SAFE-DRIVING DAY

SECOND ANNUAL S-D OBSERVANCE DECEMBER 1

Norcrafters were preparing last week to join in the second annual nation-wide observance of "S-D Day" on Thursday, December 1.

Sponsored by President Eisenhower's Committee for Traffic Safety in cooperation with a number of prominent national organizations, S-D Day—Safe Driving Day—is a challenge to every community to observe the complete 24-hour period without a single traffic accident.

First observance of the day last year resulted in a notable decrease in traffic mishaps and fatalities.

Ontario Norcrafters, in particular, made notable contributions to the program last year. The community had only one minor traffic mishap that day. Following S-D Day Ontario Police Chief H. W. Swinney forwarded a personal commendation to Ontario facility's Bob Snider for his outstanding initiative and assistance in the program.

Top - notch safety suggestions were passed on to Norcrafter share-the-ride drivers and passengers by the Los Angeles Police Department Traffic Education Section last week for S-D—and everyday—use.

With Going My Way travelers using traffic-loaded freeways daily, the Traffic section emphasized that an increasing number of freeway accidents are being caused by lack of attention at the wheel, or "highway hypnosis".

The condition, the Los Angeles police pointed out, results from the very combination of factors that make freeway travel so inviting—absence of cross streets, pedestrians, and traffic lights. The suggestions apply as well to travel on roads other than freeways.

To help combat the "hypnosis," the Traffic Section sent along these suggestions:

1. Drivers must give full attention to driving while on freeways. Things happen fast on freeways—they are not engineered for the "part-time driver".

2. Drive defensively. Don't rely on someone else's good driving to keep you out of trouble.

3. Be sure your car is well ventilated. This will help keep you from becoming drowsy.

4. Allow sufficient clearance between your car and the one ahead of you. At 55 miles per hour, your car travels over 60 feet just during the time it takes you to react to an emergency.

5. You are not paying attention to your driving if you are being distracted by drivers on either side of you.

The Traffic Section has, on several occasions, lent its support and counsel to Northrop News and Norcrafter programs for traffic safety.

Two notable programs gained national attention. The "Courtesy Equals Safety" slogan (May 18, 1949) became a regional byword. Recognition also came to the plant for the "Give Safety a Hand" spread of March 25, 1953.

Planning . . .

(Continued from Page 1)

ability to create the best producibility possible. In this connection studies touch on equipment, tooling, secondary production aids, material handling, processing technique, etc. Close liaison is maintained with Engineering Producibility regarding design guidance.

This Manufacturing Research program is probably one of the most important programs under the control of the planning team. Built around the representative functions of the Manufacturing-Materiel division, the research operations are successfully aiming at producing the best results possible toward producibility consistent with cost reduction.

The team is sparked by the Production Engineering group, which carries on the master research in workability of materials; advances in tooling and production techniques; simplified processes; and liaison with Engineering.

The balance of the team covers such research as is essential to equipment applications; special design equipment; mechanical material handling; secondary production aids; operation line sequencing and layouts for straight line flow; manufacturing plan preparation to guide production in lowest man-hour requirements to produce units; and many others.

Typical of some of the projects already in effect as a result of the research program are the Adhesive Bonding programs; Honeycomb Structure applications; Drivmatic rivet applications; and innumerable other defined programs which have helped the production operations to reach the high level at which they now stand.

The continuous guidance of the Manufacturing Planning Team is especially applicable at this time, putting Northrop in a better competitive position now that customers are evaluating the management of programs to a greater degree than in the past, when most evaluations were on purely the technical aspects of the product.

The complexity of the modern airplane and the still greater complexity of anticipated future aircraft require the closest teamwork not only between the Engineering and Manufacturing divisions, but in all other divisions, as well.

The goal is to offset the trend to growing complexity with simplification made possible by the ingenuity of personnel and the application of design and production techniques perfected over the past several years.

Inter-division Teamwork

(Continued from Page 1)

Control was one subject of the Production Forum discussions).

In the area of Tool Design, the record shows that maintenance tool design costs — those recurring costs resulting from changes made after the original design completion—dropped by 43.3 per cent in the course of the three contracts, from 1535 hours to 870 hours.

At the same time, maintenance hours used by Tool Fabrication personnel in making changes to original tools, and in replacing and reworking worn tools, decreased over two-thirds — from 5015 hours to 1580.

Both design stability and tooling labor performance have been further reflected in the reliability and operational effectiveness of the product in the field.

The SAE meeting participation by Norcrafters was over a fairly wide area of subjects.

Chief Design Engineer W. E. Woolwine led the panel discussion on wings, with W. R. Slagg, Airframe and Mechanical Design, as group secretary.

John Van Hamersveld, Engineering Producibility, headed the panel on "Forging Techniques to Reduce Machining". L. M. Christensen, also of Engineering Producibility, was secretary on this panel.

Ed Krawczuk, Manufacturing Control, was on the Tool Control panel, which considered subjects like the coordination of tool schedules with production requirements, use of tab equipment in tool control, and tool shop loading.

On the Process Control panel, V. S. Sorenson and Howard Childers, Quality Control, joined in the discussions, which included new processes—a subject of continual study here.

Paul Von Essen, Liaison Engineering, acted on the panel "Engineering and Manufacturing Look at Flight Line Operations".

A. S. Bowser, jr., Palmdale, joined other industry experts on the Powerplant Installations and Components panel.

Plant Layout discussions were held by a group that included Milt Uhler, Area and Equipment Engineering; and another Industrial and Plant Engineering representative, Plant Engineer Gene Musk, was on the panel for "Preventive Maintenance and Equipment Replacements".

George Mangurian, chief of Structures, was chairman of a technical session on Materials and Structures, with William Oakes, Structures, as secretary.

Northrop News

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HARRY HERRANEN, Assistant Editor (Nights)

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BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — Wednesday noon one week before publication.

FOR SALE

TV, 17" Packard Bell Console (with doors), Cabinet excellent condition, TV needs tube. $50. ORchard 2-6998, after 6 p.m. or weekends. A

FURNITURE, 3 rooms, near new, sell all for $400. No partial sale. Write to Northrop News, Box 714. A

RANGE, O'Keefe & Merritt, fully automatic, chrome top, Grillevator, glass oven door, griddle, vanishing shelf, Kool Kontrol panel, sells for $400, $200. Write to Northrop News, Box 712. A

BADMINTON RACKET, four birds; fiction and nonfiction LIBRARY, send for list. Write to Northrop News, Box 711.

COAT, size 4, Girl's red, $3; Teenagers SKIRTS (waist 23-25) and evening DRESSES; Boy's size 12 BATHROBE, $1.50; SWEATERS and SLACKS 50c each; DRESSES, size 14½; Slingerland MARCHING DRUM, $16. FR 5-4763. A

TRICYCLE, boys' 20" wheel base, like new, deluxe model, $15. MARVEL T. BUTLER, OR 7-4447. A

CRIB AND MATTRESS, blonde, double-drop sides, very good condition, $15. EX 8-4007. A

GAS REFRIGERATOR, Servel, good condition, 6 cu. ft. $45. R. G. ECKLES, OR 1-5046. A

TABLES, three mahogany, all glass tops, reasonable; Girl's BICYCLE, $5; radiant GAS HEATER; Pontiac RADIO for car. OS 6-9792. A

TRAILER, 2-wheel, 4'x8' box, must sell, $25. WALDEMAR MUTH, OR 7-4730. A

FORD, 1949 tudor custom, overdrive, $425. GLEN FEE, PA 1-7719. A

ACCORDION, 120 bass, made in Italy, 2 yrs. old, cost $550, $250 cash; ½ carat ladies DIAMOND RING, cost $500, $250; two blue PARAKEETS and cage, cost $16, $6. TE 5-1719. A

TV, 12" console, Packard Bell, top condition, $38; F.M. TUNER, Heath, $18. ROBERT, PL 5-2103. A

FORD, 1952 V-8 4-dr. Customline, Fordomatic, $695. NO 4-8024, evenings. A

SPRINGER SPANIEL, registered, five months old, $25. E. A. KMIECIAK, OS 6-5057. A

HILLMAN MINX, 1953 4-dr., $700. OS 5-8110. A

WILLYS, 1940 4-door sedan, $75. AL MAHER, FR 5-5197. A

NATIONAL NC-183D double-conversion communication receiver, like new. XCU-2 100/1000 kc calibrator and matching speaker, cost $453, $300. NE 1-7650. A

FORD CONVERTIBLE, 1932, chopped top. 1942 Merc. engine, Edelbrock heads and manifold. OS 6-5716 after 4:30 p.m. A

TACHOMETER, 200 to 2400 RPM marine type, never used, $12; SECTIONAL, 3 piece, nylon material, tapestry design, good condition, $25; ERECTOR SET, model 7½, complete with electric motor, has been kept in excellent condition, $16 value for $7.50. E. B. GUNTHER, OR 7-1401. A

HOUSES, 2 on 1 lot, 3-br. in front and 1-br. in back, both rented, $165 total monthly, Manchester - Vermont district, $17,500. PL 9-6332. A

VACUUM CLEANER, Electrolux, tank type, good condition, $35. JAMES R. HINSHAW, VE 8-2413. A

STUDEBAKER, 1951 sedan 4-door, overdrive, $350 cash. OR 7-8797. A

HOUSE, new 3-bdm., carpeted, tiled features, disposal, dbl. gar., R-2 lot, close to Northrop, $3500 dn., $13,950 full price. OR 4-1711. A

GAS STOVE, good condition. FR 4-4019.

DODGE, '39 with '47 engine, 4-door, CARL ROSSNER, OR 7-9820 after 4 p.m.

TIMING UNIT, automatic Intermatic Time-All, never been used, sells for $12, $8.50. G. J. KENNELLY, Write to Northrop News, Box 709. A

PLYMOUTH, 1948 4 door, $350 or make offer. ROY M. BROOK, DA 4-3542. A

NASH, 1950, $275. Terms, take trade, needs manifold. O. N. MARTIN, PL 4-3515. A

DRESSES, 3—size 10 girl's, 2—Ruth originals (1 cotton, 1 nylon), 1—custom made (nylon), $10 for all. WILBUR A. TAYLOR, GR 7-3902. A

HILLMAN HUSKY, 1955, leather interior, $1250. CHARLES D. FULLER, EM 2-5174.

BICYCLE, boy's, Hiawatha, 26", balloon tires, $15. TED HERZOG, PL 1-2784. A

RUG, 6x9 genuine Chinese Oriental, rust color; German BAYONET; DESK, mahogany knee hole 8 dr. and chair, like new, reasonable; GUN, German Luger, 9mm, like new, make offer; BICYCLE, girl's 20" with coaster brake. PL 2-9597. A

TABLES, two step end tables and one coffee table, wrought iron legs, matched set, excellent condition, $25. ALBERT HERRING, OS 5-4994. A

ELECTRIC TRAIN, freight type, three cars, two switches, extra track, uncoupler, $15. V. C. HARDEN, OR 7-6533. A

FOR SALE

ROLL AWAY BED, mattress, full size, $15; WRITING DESK, 7 drawers, mahogany finish, $10; DROP LEAF TABLE, porcelain top, $15. LILLY T. BEST, PL 5-4459 after 4:30 p.m. A

BICYCLE, boy's 26", $12.50; IRONER, $15; ELECTRIC ROASTER, $7.50; child's DESK AND CHAIR, $5. W. E. TOWNSEND, OS 6-3448. A

FORD, '55 V8 Fordor Customline, overdrive, $400 for equity, no trades. H. SNAY, Write to Northrop News, Box 708. A

ELECTRIC RANGE, 1950 Kenmore, excellent condition, very reasonable. OR 2-8620. A

FORD, 1951 custom club coupe, overdrive, new brakes, dual pipes, $150 cash for equity, take over payments of $44 per mo., balance $629. BILL HALE, OS 6-0652. A

FURNITURE, Kroehler 3-piece sectional sofa, rose frieze, $55; limed oak coffee table, end table and large corner table, $25 or sell separately; 2½ gal. AQUARIUM, round, with light, black lacquer base, $15, fish included. EX 7-9900 after 6:00 p.m. A

MICROMETERS, 5 sizes 1" to 5", used very little, like new, $75 or best offer. MARIE L. MANNI, Write to Northrop News, Box 707. A

TYPEWRITER, Remington standard, excellent condition, $25. ELSIE M. HICKS, DA 4-4766. A

FREEZER, 17 cu. ft., Ben Hur, 3 yrs. old, used 6 months, like new, cost $525, $165 or best offer. D. WEST, TO 3-3468. A

CHEVROLET, gray, 1949, Convertible Deluxe, $350. SHEILA CARLSON, FR 9-2545. A

AUTOMATIC WASHER, Frigidaire, 1 yr. old, yellow enamel, cost $315, sell for $150. BARBARA PENKE, FA 8-1628. A

FURNITURE, kitchen dinette set, chrome trim table and 6 chairs, $40; divan, chair and ottoman, $50; coffee table, $4; end table, $2; lamp, 6-way, $10; radio-phono record maker and player, console model, walnut, $50; small gas heater, $5; balloon tire tricycle, $7; TV table, $6; box of yellow TILE, $2; HOUSE TRAILER, 14 ft., used 3 times, has new awning, furnished, $795, sleeps 4, factory built walk-in "Traveler." PL 5-6610. A

ELECTRONIC EQUIPMENT, various, cost over $220, will take $135; TV CHASSIS, several partly stripped, and ARC/5 TRANSMITTER converted to 6-volt power supply. Any reasonable offer. DA 4-8177. A

EASY CHAIRS, two, good condition, $40 for both. DON BULL, FR 4-1152. A

PUPPIES, AKC Boxer, 11 weeks old, fawn, $35; BOAT, 14 ft. Glaspar, windshield, steering wheel, used one season, $350. NEwmark 8-1722. A

CHEVROLET, 1940 club coupe convertible, body lowered, $100. SALLY COLDIRON. Write to Northrop News, Box 720. A

TRAIN SET, H.O. gauge, complete, 5 engines, 20 cars, switches, scenery, 50' track, $95, will consider selling in part. WILLARD CONROW, SY 5-2056, 6 to 9 p.m. A

SCOOTER, Salsbury, good condition, $65. M. B. HINK, OS 6-3639. A

HUDSON, '50 Pacemaker, 2-door coupe, $300. V. C. HARDEN, OR 7-6533. A

HOUSE, 2-bedroom, unfurnished, fenced yard, walking distance to Northrop, available November 10. $1000 down to FHA financing. DON MANN, AX 1-0558. A

FORD, 1950 custom 2-door, overdrive. G. F. EGAN, PL 3-9787, after 5 p.m. A

TV COMBINATION, 16" Admiral, RADIO, AM and FM 3-speed changer, price $100; Maytag auto. WASHER, like new, $165; Coldspot REFRIGERATOR, $30. O. PELLICAN, OS 6-3432. A

HOUSE, Torrance, near new, 3-bedrooms, 1½ baths, landscaped, fenced, inside completely redecorated, fireplace never used, immediate occupancy, $14,500 on GI (10% down) financing. ERNEST WECKBAUGH, DA 6-3603 or OR 8-8973, before 5 p.m. A

STROBE, Heiland Strobenar III electronic flash, 100-watt-seconds, complete with wet battery pack and AC extension cord; Solar 120 ENLARGER, completely equipped for 2¼ x 3¼ and 35mm work. S. J. GOLDBERG, PL 4-1096. A

MOBILE HOME, 30' Spartan Mansion, cherry maple living room set, w/w carpets, awning, etc. $800 for equity, take over balance approximately $900. LEROY DICK, DA 6-9939, between 12 and 7 p.m.

MG TC, 1949, $1600. OR 2-8980 anytime. A

TIRES, two 15x7:00 almost new; TUBES, one 15x700 safety, one 15x700 regular, reasonable. JIM DRIVER, OS 5-3901.

FOR SALE

TV, 19" Teletone, mahogany console, near new picture tube, $60; Green & Gray SECTIONAL, with matching chair, $55; 2 mahogany END TABLES, $9 each; mahogany CORNER TABLE, $10; 2 planter table LAMPS, $6 each; 9x12 Gulistan Oriental RUG & PAD, $60; 2 matching THROW RUGS, $5 each. PL 6-7337. A

MERCURY, 1951 coupe, custom upholstery, full race engine, Edelbrock-equipped, nosed and decked, $1099. R. J. RUTTER, PL 6-9610, after 5:30 p.m. A

END TABLES, pair, mahogany, glass tops, two tier, 20"x20"x28" high; 9'x12' grey green high pile RUG (no design) and pad; Ladies' DRESS, black with royal blue dot, taffeta, size 10; ¼ h.p. motor (used) ½" shaft. OR 4-6334. A

CABIN, two-story, Green Valley (San Bernardino Mountains), completely furnished, accessible all year, close to lake, $4500. Will take $1000 down. SHIRLEY BLACK, OS 6-5434. A

RUG, 8'x10' all wool, with pad, $25; three yards of hall CARPET, 36" wide, with pad, all wool, $15. MARIE CATALDO, OS 5-5942. A

FORD, 1953 Fordor custom, 15,000 miles, overdrive, OS 6-4363. A

BABY CARRIAGE, Hedstrom, blue and grey leatherette with rain shield, mattress, collapses to carry in car, not used over ten times, cost $65, will sell for $35. WANETA S. LAWTON, OS 6-3556.

TV, Dumont 19-inch, needs little work, new tube 3 months ago, $50. M. W. SMITH, OR 1-3427. A

HOUSE, 3 bedrooms, 6 closets and double garage, 2 miles from Northrop. OS 5-3215. A

WIRE RECORDER, Webcor, never used, complete, extra spool of wire, best offer. AD 3-2559, before 3:30 p.m. A

PING PONG table, used once, complete with new net and paddles, $25; POKER TABLE, like new, seats eight people, covered with green felt, $35. C. H. MARTIN, OR 2-4461. A

ACCORDION, 120-bass, 7 treble switches, one bass switch, $225. (Cost $800). JOHNNY RUEF, OR 2-0492. A

HI-HAT, with cymbals, $10; Japanese RIFLE, bolt action, 31 caliber, $15; ladies' Helbros WRIST WATCH, diamonds and rubies, cost $486, $200; small comfortable BED-SOFA, light enough to fab-tint, $25; Sears WIRE RECORDER, radio, phonograph COMBINATION, extra spools of wire, as is $35; '39 BUICK, 2-door Special sedan, '51 engine, safety tubes, $100. FR 2-9051. A

FUR COAT, Mink sides, size 14 or 16, $250. ORchard 2-2634. A

WALL FURNACE, dual, 25,000 BTU, good for small home, $20. JESSE BRANT, OR 7-2848. A

PUPPIES, beagle, one month old, registered, call after 4:30 p.m. DA 9-2847. A

OLDS, 1950 88 4-door, Hydra-Matic, $550. OR 1-1588, before 3 p.m. A

REVOLVER, Colt .45 single action Army, special grips, 5½ in. barrel, $60; 45-70 Springfield RIFLE, $16; MOTORCYCLE, Triumph 110, $500. OR 1-7458, before 3:45 p.m. A

STUDEBAKER, 1950 club coupe, near new motor, air conditioner. EARL ROLPH, LU 1-7572. A

FREEZER, Carrier upright, 22½ cubic feet, holds approximately 750 lbs. of food. M. J. LONG, OR 2-1659. A

TV 12½" Packard-Bell recently overhauled, $25. RICHARD HEISE, OS 6-3138. A

OLDS, 1950 88 two-door, Hydra-Matic. H. M. LOOPER, OR 2-0493. A

PIANO, baby grand, natural mahogany, $395. WM WINTERS, FR 2-2862. A

CHEVROLET, '41 sedan, $40. J. E. LYNCH, DA 6-5251. A

OUTBOARD MOTOR, 2 h.p., $25. J. G. BURKE, OR 1-1992. A

TV, table model, 17" Emerson, 1952 model recently overhauled, 24-tube set, standard coil turret tuner, $75. K. FLANAGAN, DA 6-4574. A

FORD, model "A" pick-up, cheap. OS 5-2159. A

DINING SET, 8-piece walnut, 6 chairs, table, chest, deliver anywhere in LA, $75. R. C. COLLINS, DA 4-7529. A

OLDS, '41 sport coupe, standard transmission, $50. PAUL D. CHAIKER. Write to Northrop News, Box 719. A

LAND, 2 acres, one acre highway frontage. Highway 138, Palmdale-Little Rock Highway, in irrigation district, reasonable down, $3500. JOHN KABEL. Write to Northrop News, Box 717. A

HOUSE, 3-bedroom, 3 yrs. old, newly painted, near schools and Plant 1, fenced yard, flagstone patio, detached double garage, wired for electric range, price includes curtains, drapes and some w/w carpeting. HOWARD GILL. Write to Northrop News, Box 716. A

WHEEL CHAIR, collapsible, Everett-Jenkins, like new, $65; WHEEL CHAIR, Cane, good condition, $25. AUDREY LAMBERT, OS 6-3882. A

MANIFOLD, Edmunds EBS-1-4 dual intake for 1937-1952 Buick series 40 and 50, $30; Carter CARBURETOR for above, $12.50; two 26-inch Advance steel-pack MUFFLERS for '52 thru '54 Ford, $3 each. EXmont 7-9900 after 6:00 p.m. A

CHEVROLET, 1953, series 210 2-door sedan, conventional shift, $1050. ROBERT SALEM. Write to Northrop News, Box 715. A

OLDSMOBILE CONVERTIBLE, 1955 (88), all power extras, $3000. J. D. MURPHREE, AX 3-8784. A

Down Range . . . . . .

Military Relations' OPINDOC (Operational Indoctrination) team of Bob Love and Bill Pruitt made striking impression on observers at Hamilton AFB recently, according to report from Tech Rep Ernie Felis . . . Said Felis: ". . . the excellent briefing by these gentlemen was climaxed by a sensational flight demonstration of the F-89D by Bob Love . . . His demonstration included . . . single engine go-rounds, short field landings, maximum climbs and descents, high speed passes and an inverted pass which still has people excited."

Air Defense Command's Flight Safety Award for year without accident was presented recently to 321st FIS at Paine AFB . . . Presentation was made by Major General Roy H. Lynn, commander, Western Air Defense Force, to Lieutenant Colonel Samuel C. Grashio, commander of 321st . . . Witnessing ceremony: — Brigadier General Romulus W. Puryer, commander, 25th Air Division, and Colonel Ira F. Wintermute, Paine commander. . . .

Elmendorf - based 65th Fighter Interceptor Squadron has has claimed "highest-paid airman in Air Force", Tom Kelecy, tech rep, writes . . . Recently Lieutenant Sam Melvin flew Tech Sergeant G. R. Maroney in a Scorpion to 45,000 feet, at that altitude presented Maroney with his paycheck!

Herb Barr, Production Engineering Test Planning, was recent winner in nationwide essay-type Electroni-Kwiz contest conducted by Electronic Design trade magazine . . . Herb won valuable household items for best essay on question "What do you want to know about a new product and how do you like to have the facts presented?".

FOR SALE

TV, 16" G.E., mahogany cabinet, floor model, can be used as table model, recently overhauled, $46. DA 4-8177. A

TIRES AND TUBES, 2 WSW Goodyear, excellent condition, 6:40x15, $20. L. ABRAMS. Write to Northrop News, Box 704. A

PICK-UP BOX, 3'4"x5'6", factory made for '37 Chev. coupe, $5. J. A. HARTINGER, PL 6-8893. A

SIAMESE CATS, available December 19, thoroughbreds, no papers, $15 each. WILLIAM MYERSON, OS 5-1207. A

WEDDING RINGS, diamond, original price $800, worn less than year, center stone of engagement ring 89 points, 11 other diamonds, $300 cash. OS 6-0181, 9:30 to 3:30, after 3:30, OS 5-1545. A

CHEVROLET, 1941 club coupe, not beat up, inside or out, $100. J. A. KIRKPATRICK, OS 6-8583. A

OVERCOATS, men's heavy, one navy, one oxford grey, size 42-44, $10 each; beautiful Silver Fox STOLE, $75. B. C. BARTON, GR 7-1539. A

WASHER, A.B.C. automatic, A-1, slightly used. AX 1-0016. A

CHEVROLET CHASSIS, 1927; 8 WIRE WHEELS; good deal for trailer; RADIO PARTS. Make offer. OR 7-1540 after 5 p.m. A

FORD, 1955 V8 Sunliner, power brakes, $2395; Bendix AUTOMATIC DRYER, 1952 model, in storage since 1953, $75; 3 piece modern SECTIONAL, $50. R. D. BAGBY, DA 4-5342. A

HI FI SPEAKER, G.E., $9; R-J type SPEAKER ENCLOSURE, $25; Precise vacuum tube VOLTMETER, $15. FR 4-4994. A

WASHER, Maytag, wringer type, automatic pump, $25; fully automatic Southern Electric DEEP-FRY COOKER, 5½ qt. capacity, like new, $12. E. GRIFFIN, DA 6-3862. A

SCOOTER, 3-horsepower, All State, 1955, has spare tire, $160. FR 9-9249. A

ORIENTAL RUG, 9x12 Deep Pile, high sheen, like new, sacrifice; VIOLIN and case, good condition, cheap. M. K. GOUKER, OR 7-6941. A

ELECTRIC MOTORS, 1/3 H.P., still in factory cartons, $12 each. A. H. KELLER, DAvis 9-3594. A

WASHING MACHINE, wringer type, Speed Queen, perfect condition, $55. OS 5-1765. A

BOOKCASE - HEADBOARD, red maple, double, 3 compartments, $22.50; ROLLER SKATES, 2 pair, white, Chicago, sizes 6½, 7½, $10 pair; TRUMPET, Olds recording, cost $285, $75. LOIS S. MATHIAS, OR 4-1460. A

RADIO - RECORD PLAYER, Philco table model automatic one-speed combination, good condition, $35; ladies FUR COAT, size 14, South American lamb, $35. W. L. HARPER, PL 8-2507. A

FURNITURE, Mauve living room suite, $40; platform rocker, $25, both in good condition. OR 1-8901. A

HOUSE, 3 bedroom modern, w/w carpets, mural, dichondra, fenced yard w/tropicals. Lot 50x150, will take 2nd. Total $12,500. Manhattan Beach. OR 7-9137, days. A

CHRYSLER, 1948 Town and Country Hard Top Sedan, rebuilt engine, $250; DODGE coupe, 1940, $125; Rollaway coil spring BED and MATTRESS, like new, ¾ size, $22.50. LEE B. JOHNSON, FR 5-4910. A

HOUSE, 3-bedroom, 5' redwood fence, w/w carpeting, 3 years old, lot 50'x 120', 15 minutes from Northrop, $11,000, will G.I. or F.H.A. BILL FRANKUM, FR 9-1309, after 5:00 p.m., except weekends. A

LOOM, 39" hand weaving, bench, accessories, solid cherry wood. WM. C. WAREING, OR 2-1137. A

FOR SALE

LAWN SWING, steel framed. R. H. SCHLIEBE, PL 9-4460. A

BOXER, thoro-bred, 1 year old, male, reasonably priced for good home. G. E. TESCH, DA 4-1636. A

AUTO LUGGAGE RACK, 36" x 39", $10. ROBERT E. SMITH. Write to Northrop News, Box 724. A

TRUCK, '51 International ¾ panel, heavy duty; 10" TELEKIT; various radio and television PARTS, condensers, resistors, coils, etc. OS 6-8250. A

REFRIGERATOR, Coldspot, 7.4 cu. ft. 18 lb. freezer in top, like new, $75; STUDIO DIVAN, makes into bed, never used, $39. D. D. GRANT, OR 8-9701. A

WEDDING RING, platinum with diamonds, like new, $75. D. GRAHAM, AX 3-7372. A

BIKE, Girl's, 24-inch, like new, $30. BART FAY, AX 2-4481. A

HI-FI, 20 watt Heathkit amp., Gerrard RC-80 changer and 12" difusicone speaker enclosed in reflex cabinet, $100; near new 1956 21" RCA TV with UHF, black cabinet and TV stand, $175. SHEILA CARLSON, FR 9-2545. A

HI-FI CABINET, Karlson 15" model, $30; BICYCLE, boy's 24" deluxe Monarch, all extras, A-1 condition, $30. FR 9-1771.

HOUSE, 6 rooms, 3 bedrooms, large, shrubs, roses, fireplace, double garage. Fenced yard, near George Washington High. $16,000. ANDREW MNAHONCAK, PL 4-2410, after 4 p.m. A

BABY BUGGY, Hedstrom, $10; STROLLER, $7; BASSINET, $5; maple twin size BED, $6. R. H. BENTON, TO 7-7593. A

FURNITURE, 1 couch, 2 highback living-room chairs, 2 end tables, 2 table lamps, 1 cocktail table, 1 floor lamp; 1 apartment size gas STOVE; 1 DRAFTING TABLE, 5'x3' adjustable, post materials, reasonable. AX 2-5800, after 6 p.m. A

CADILLAC, 1941 sedan, $100. DON EVANS. Write to Northrop News, Box 723. A

MUFFLERS, two 26-inch Sonny's glass pack, used only one month, like new, $15. LEONARD GREENBERG, FR 4-5405.

HOUSE TRAILER, 1941 14', stove, heater, completely equipped, newly reconditioned. Best offer over $200. H. K. EIDE, OS 6-5207. A

HORSE, not a pony, short, built like quarter horse, mild disposition. FORREST AYREST. OR 4-1227. A

TV console, 17" Philco, mahogany, $65; STUDIO COUCH, $15; SOFA and cover, $15. FLORENCE POYNTER, PL 1-6897, after 5 p.m. A

CLARINET, B-flat, like new, deluxe case, cost $110, $60. R. WOOD, OR 2-1205.

AUSTIN, 1949 sedan, $175. R. W. FEENY, EA 2-0646. A

HOMING PIGEONS, 75c per pair. SHIRLEY HALL, EA 2-4569. A

SECTIONAL, 3-piece; CLUB CHAIR; glass top COFEE TABLE; full size GAS RANGE. Priced to sell. NORMAN FREED, OS 5-5477, after 4 p.m. A

BUICK, 1950, 4-door Super Riviera, Dynaflow, $550. E. WIRTH, OR 4-4293. A

STOVE and REFRIGERATOR, good condition, $150; DRAW DRAPES (Chinese modern) and traverse rods, $50; fingertip length Silver Fox FUR COAT, excellent condition, $150, OR 2-8022. A

RUNABOUT 12' plywood and Fiberglas, like new, steering wheel, control cables and trailer, $175; OUTBOARD MOTOR, $40. EX 7-5938. A

WASHING MACHINE, automatic, good running condition, make offer; Baby's BASSINETTE and pad, $5; VANITY and bench, $5. R. A. NELSON, DA 9-3702. A

SOFA, 92" long, matching chair. Massive styling, rose frieze upholstering, $25; other pieces for sale also. E. W. BURTON, PL 5-4258. A

(Continued on Page 4)

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:30 a.m. — 4:15 p.m.

(Zone 1)

SILVERLAKE, Los Angeles. (Travel Hoover St. from Exposition Blvd., south to Imperial Hwy.). PAT GALLEGOS (5340-39771, Ext. 1975). NO 2-4233. 13-1

(Zone 13)

NORTH OF CULVER BLVD. (Driver to complete 5 man car pool. Must live in Zone 13 or 14, north of Culver Blvd.). M. SETZER (3142-30661. Ext. 2022). EX 8-7814. 3-13—13-13

(Zone 14)

CRENSHAW & SLAUSON, Los Angeles. (Will consider car pool). CHARLES MONTERO (7510-41745, Ext. 733). PL 2-5870.

7:30 a.m. — 5:15 p.m.

(Zone 1)

WESTERN & 65TH ST., Los Angeles. JAVIER CAMPA (1810-41375, Ext. 2024). PL 2-4411. 14-1

(Zone 14)

PICO BETWEEN LA BREA & FAIRFAX, Los Angeles (19). MILTON GRUMMER (3310-30357. Ext. 477). WE 1-4320.

3:45 p.m. — 12:15 a.m.

(Zone 3)

AZUSA & GLADSTONE, Azusa. (Leaving Foothill home Covina, Azusa area 1:30 p.m. Will pick up riders enroute to work at Northrop, close to Garvey, Rosemead or Imperial Hiway. Car pool considered). JOHN HEMPSMYER (5223-77, Ext. 563). 16-3

4:45 p.m. — 1:15 a.m.

(Zone 1)

ALVARADO & WEST 1ST, Los Angeles. (Will pick up rider anywhere on or close to route. Change route if necessary. 2nd St., south on Alvarado, West on Olympic, South on Western to plant, can take Van Ness). M. A. GALLEGOR (5502-18067. Ext. 2741). MU 3462. 18-1

(Zone 7)

AVALON & 223RD, Wilmington. (Car pool considered). J. A. UNTIEDT (5340-38, Ext. 1641). 18-7

(Zone 9)

SEPULVEDA & HAWTHORNE, Torrance. (Can take 3 or 4 riders—have station wagon). GRACE GARLAND (5507-34998, Ext. 526, 564). DA 6-0028. 18-9

(Zone 13)

SAWTELLE & SEPULVEDA, Culver City. (Sepulveda, Centinella, Florence, Prairie to Plant. Will take anyone close to route). LEO R. WEISS (5621-24103, Ext. 2649). EX 8-0500. 18-13

(Zone 14)

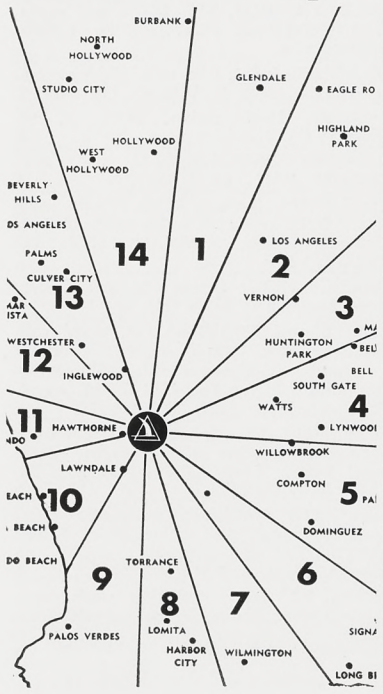
BEVERLY & FAIRFAX, Los Angeles (36). (Will pick up on La Brea South of Beverly). P. FRIZLER (5509-19953, Ext. 2075). WE 9-1578. 18-14

Miscellaneous (Split Shifts)

(Zone 1)

CRENSHAW & W 104TH ST. and Wilton Place & W. 104th St., Los Angeles (47). (I would like to have three or four riders; Mariposa. Hours: 6:45 a.m. to 3:30 p.m.). ANNE S. RAGER (6455-41989, Ext. 1281). PL 5-6697. 20-1

Zone Map



Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 1)

CRENSHAW & MANCHESTER, Inglewood (4). (Anyone who drives on Crenshaw Blvd., between Manchester & Broadway to Northrop Plant). CHRIS T. RODGERS (5515-41566, Ext. 1825). OR 7-9481. 2-1

ARLINGTON & 48TH ST., Los Angeles. JIM LOVE (5160-14507, Ext. 548). AX 3-0986. 2-1

OLYMPIC & HOOVER, L.A. 6. SAM SAKI (5583-98. Ext. 1292). DU 4-2637 after 5 p.m. (message). 2-1

(Zone 8)

CRENSHAW & 101 HIGHWAY, Torrance. J. E. LYNCH (5163-14885, Ext. 1821). DA 6-5251. 2-8

CRENSHAW & 190TH, Torrance. RAE FREEMAN (5351-16062, Ext. 1706 or 1300). DA 9-6079. 2-8

(Zone 9)

INGLEWOOD BLVD. & 184TH, Redondo. MARY ST. CLAIR (5503-41393, Ext. 2681). FR 9-9888. 2-9

(Zone 14)

LA BREA & WASHINGTON BLVD., Los Angeles. HERBERT PINKERT (5524-40631, Ext. 2634). WE 4-8974. 2-14

RIVERSIDE DR. & COLFAX AVE., North Hollywood. W. L. EGGLESTON (5587-22892, Ext. 2750). 2-14

HYDE PARK & CENTINELA, Inglewood RUTH A. MAUGHAN (5351-36186). Ext. 541 or 1658). 2-14

7:30 a.m. — 4:15 p.m.

(Zone 1)

FLORENCE & CRENSHAW, Los Angeles. AMBROSE FERNANDEZ (3330-41801, Ext. 2374). PL 8-6347, 7-9 p.m. 3-1

(Zone 2)

VERMONT & 51ST, or 51st and Normandie, Los Angeles 37. GLORIANNE JONES (9330-41955, Ext. 2228). PL 9-7498. 3-2

CRENSHAW & IMPERIAL, Inglewood. BARBARA BARKER (1421-39184, Ext. 691). OR 1-2850. 3-2

(Zone 4)

TWEEDY & LONG BEACH BLVD. or Imperial & Long Beach Blvd., Lynwood. PAT REEVES (8322-27469, Ext. 1605). LO 7-6915. 3-4

(Zone 5)

SOUTH ST. & BELLFLOWER BLVD., or South & Clark, Lakewood (11). (Will walk to either intersection). D. J. PETRUCCI (5940-41562, Ext. 2661). TO 7-6931. 3-5

PARAMOUNT & GARFIELD, Paramount, Calif. (Can be picked up on Atlantic or Long Beach Blvd.). TRUDY KAUFMAN (1421-40455. Ext. 1811) ME 0-2167.

(Zone 7)

VERMONT & OCEAN ST., or Normandie and Ocean St., Torrance. (Ride home only. Can go with anyone coming from Wilmington or San Pedro, Ocean St. is called 228th). JEANNE GARZA (1421-12229, Ext. 1811 or 2393). DA 6-2567.

(Zone 8)

CRENSHAW & 101 HIWAY, or Rolling Hills Road & 101 Hiway, Torrance. MARGARET WILSON (5339-16643, Ext. 488). DA 6-0399. 3-8

CRENSHAW & 174TH, North Torrance. JOYCE RANZENBERGER (3880-12500. Ext. 1230). DA 9-6118. 3-8

(Zone 9)

HAWTHORNE BLVD. & 147TH, Lawndale. NANCY SITSER (1421-38426, Ext. 1811 or 2393). 3-9

MANHATTAN BEACH BLVD. & PRAIRIE AVE. Lawndale. DORIS M. SMITH (8620-42218, Ext. 1751). 3-9

INGLEWOOD & 182ND, Redondo Beach. RAMONA KENNEDY (5351-16037, Ext. 2582). FR 9-1636. 3-9

(Zone 10)

HAWTHORNE & ROSECRANS, Hawthorne. GLORIA HOULIHAN (3141-33167 Ext. 484 or 457) OS 5-3622. 3-10

(Zone 12)

PRAIRIE & 120TH, Inglewood. AGNES MELLICK JEFFRIES (5930-41618, Ext. 2498). OS 5-1259. 3-12

(Zone 13)

PICO & ROBERTSON, or Pico & Beverly Dr., Los Angeles (35). JEAN FERRUCCI (8320-37306, Ext. 1605). CR 1-7310.

NORTH OF CULVER BLVD. (Driver to complete 5 man car pool. Must live in Zone 13 or 14 north of Culver Blvd.). M. SETZER (3142-30661, Ext. 2022). EX 8-7814. 3-13—13-13

BBSF CLASSIFIEDS

(Continued from Page 3)

FOR SALE

WASHING MACHINE, Kenmore wringer type; Royal upright VACUUM CLEANER with attachments; standard, treadle type SEWING MACHINE. W. LAMOREY, OR 2-7746. A

GUN, German Luger, perfect, 1939 MD, original case, $55; GE 8½ cu. ft. REFRIGERATOR, perfect condition, $68. JOYCE EBY, DA 9-7176. A

TYPEWRITER, L. C. Smith, $50; 7½-ton Cletrac TRACTOR WINCH, COMPRESSOR, GENERATOR, $8000 value, sacrifice, $995. E. J. HARVEY, KE 3-1765, Anaheim. A

REVOLVER, Colt .38 special, officers match model on 41 frame, rear sight, ramp front sight, extra pair target grips, cross draw holster, 6" barrel, $65. H. A. HARDY. Write to Northrop News, Box 722. A

TAPE RECORDER, Revere, 9 months old, new recording head, 2 hours tape. Cost $190 new, $120. WALTER HAMMER. Write to Northrop News, Box 721. A

WANTED TO BUY

ENCYCLOPEDIA, Britannica, 1954 or 1955 adult edition. GENE JUDD, FR 5-5446. B

PIANO, good. P. L. RIGBY, KE 5-6296.

GAME TABLE, Octagon, in fairly good condition. JEANNE SILER, DA 9-6643. B

PIANO, used. Need not be in A-1 condition, priced below $100. MARVIN STERN, TO 4-5576. B

MULTIGRAPH, hand-operated; also MIMEOGRAPH. LU 1-1398. B

TWO FORDS, V-8, engines must run or close to it, near junkers okay. PL 4-4384. B

SEATS, want one pair of Porsche coupe reclining seats. Will trade pair of Porsche Speedster seats plus a reasonable amount of cash depending on condition. RE 3-8212, after 5 p.m. B

CLARINET in good condition, must be reasonable. OS 6-9671. B

CONCRETE MIXER, small. Must be reasonable, but condition immaterial. GALE ELLIOTT, FR 5-9275, after 6 p.m. B

PING PONG TABLE, good shape, cheap. TOM KENDALL. Write to Northrop News, Box 702. B

G M W

3:45 p.m. — 12:15 a.m.

(Zone 5)

ROSECRANS & LONG BEACH BLVD., Lynwood (2 blocks west of Sears). CLARENCE FORMANECK (5353-18615, Ext. 1277). NE 1-7508. 6-5

(Zone 9)

VIA LA SOLEDAD & CALLE MAYOR, Redondo Beach. MARJORIE VINCENT (5516-34813. Ext. 2745). 6-9

4:45 p.m. — 1:15 a.m.

(Zone 2)

HANCOCK & N. BROADWAY, Los Angeles (31). O. Z. MAXON (9350-27914, Ext. 474). CA 5-8628. 8-2

(Zone 3)

WESTERN & 108TH or Imperial & Wilton Place, Los Angeles. (Two riders desire transportation). BERNICE PIKE (5353-16324, Ext. 1627). PL 4-4374, after 10 a.m. 8-3

(Zone 5)

ATLANTIC & AGNES, Compton. MARY L. PEMBERTON (5507-19381. Ext. 526).

(Zone 7)

AVALON & 223RD, Wilmington. (Car pool considered). J. A. UNTIEDT (5340-38, Ext. 1641). 8-7

(Zone 8)

CRENSHAW & 182ND STREETS, Torrance. OTIS H. SANDERS (5503-18571, Ext. 2683). 8-8

REDONDO BEACH BLVD. & CRENSHAW, Torrance. (Need dependable ride both ways). VIOLA TAYLOR (5352-16209, Ext. 2383). 8-8

ARLINGTON & PENNSYLVANIA or Crenshaw, Torrance. ETHEL ELLIS (5508-19617, Ext. 1292). DA 6-3760. 8-8

(Zone 9)

HINDRY & ROSECRANS, Lawndale. CLARA D. GRAY (5583-21803. Ext. 1292). 8-9

PRAIRIE & 171ST. or Redondo Beach Blvd. & Prairie, Torrance. M. E. SCHAEFER (5509-19960. Ext. 2075). FR 4-0395.

(Zone 10)

REDONDO AVE. & 3RD STREET, Manhattan Beach. MARYALICE DEWDNEY (5352-41964, Ext. 1731, 2382). 8-10

(Zone 11)

ANZA & 120TH, Hawthorne. IELENE S. FISHER (5340-41991. Ext. 1975). OS 6-0040. 8-11

(Zone 12)

NO. TRURO AVE. & 108TH ST., Hawthorne. (3 blocks west of Hawthorne Blvd.) VIRGINIA KLENKE (5352-38904, Ext. 1607). 8-12

WANTED TO BUY

RADIO and HEATER to fit 1947 Studebaker. In useable or repairable condition. RICHARD HIRDLER, HE 4-5405. B

LAND, approximately 5 acres smog-free wooded area within one hour driving time from plant. Do not require frontage, desire access road to main highway. Water necessary, telephone and electricity desirable, gas optional. Will also consider acreage with existing buildings. W. S. COOK, DA 6-2467, evenings and weekends. B

FOR TRADE

SKILSAW, like new, 8-inch, and/or Casper De Salo VIOLIN for AC light plant or Servel refrigerator. OS 6-8250, between 5:30 and 8 evenings. C

CHEVROLET, 1954 4-door station wagon, Power-Glide, trade my equity for Chevrolet ½ or ¾ ton pick-up, clear or nearly clear. VERNON L. SEYFRIED, NE 5-3921. C

FOR SALE OR TRADE

BAFFLE, folded horn, complete with Jensen extended range coaxial speaker. Will trade for good Royal standard typewriter, ?, or sell for cash. R. W. HIETT, JR., FR 2-1969. M

WHEEL CHAIR, collapsible, hand brakes, $75, or will trade for what have you. MILDRED B. DAVIS, FA 8-7533. M

FORD, '42 Deluxe, $100, or trade for tape recorder, shop equipment, tools, Hi-Fi, what have you. OR 8-7318. M

OVERLOAD SPRINGS, pair, 14", trade for musical instrument. FR 2-3321. M

OLDS, 1955, 88 super deluxe sedan, full power. JOHN BLACKBURN, KEystone 5-8886. M

DOORS, 4 interior, 32", primer coated, $1.50 each, or trade for small kitchen table and chairs; 8" Sears SKILSAW, like new, $59; 1 large lavatory BASIN, new, $3.50; '49 NASH, 4-door sedan, $150. E. J. McGOVERN, OS 5-7414. M

HOUSE TRAILER, 1947 27-foot eastern built, kitchen lately remodeled, gas apartment range, electric refrigerator, sleeps 4, will sell or trade for new vacation trailer, make offer. DOROTHY INEZ PRESTON, DA 6-7337. M

COMPETITION COUPE, full fendered '35 Ford, full Edelbrock. Sell or trade for late English motorcycle. PL 4-1713. M

BOAT, 20' cabin inboard 4-cylinder engine, $175, or trade. JAMES M. HOSNER, OR 2-0517. M

HOUSE, 3-bedroom stucco, 1 year old, garbage disposal, trees and shrubs, small house in back for poultry and rabbits, fenced and cross fenced, $11,000, $2000 down, or will trade for late model house trailer. PANEL TRUCK, 1949 Chevrolet, ½-ton, $395, or trade? AUTO TOP CARRIER, deluxe basket type, $12.50 or trade; .32 caliber Colt AUTOMATIC, basket weave holster, ammo. belt, $35 or trade for .22 cal. revolver. ORVILLE POWELL. Write to Northrop News, Box 705. M

TIRE CHAINS, Weed 8-20-15, used once, sell or trade for tire chains 7-10-15. DOROTHY MERRILL, FR 9-7724. M

LAND, 45 acre farm and buildings in Arkansas on Highway 62 near Missouri line, will sell on easy terms or trade for California house and lot. FRANK J. BIRRINGER. Write to Northrop News, Box 703. M

PLYMOUTH, 1953 Cranbrook Tudor, overdrive, $350 for my equity, unpaid balance, $816.66, or trade for clean 1947 or 1948 model car with radio and heater. J. B. SMITH. Write to Northrop News, Box 706. M

FREEZER, 20-cu. ft. International Harvester, like new, trade for 8' to 10' deep freeze of any standard make; 1940, 4-door sedan, WILLYS, for sale. ME 3-0849. M

CROSLEY pick-up, 1952, 3 extra tires, tow bar hitch included, $187 or will trade for tape recorder or portable typewriter. K. T. KRUMBACH, OR 1-7175. M

LAND, 1 1/10 acres, near Riverside, low down and monthly payments, or trade for lot in Fullerton, Santa Ana, or Anaheim. LEO DAY. Write to Northrop News, Box 701. M

MOTORCYCLE, 1955 AJS Scrambles less than 3000 miles, $675; 1946 PLYMOUTH club coupe, $150. Or trade either on or for late model pickup truck. W. T. FERRIS, PL 5-4114. M

BIKE, boy's 26" Schwinn, good condition. Trade for 24" boy's bike or sell for $20. PL 5-1071. M

BIKE, 26" boy's, $32; mahogany COFFEE TABLE and 2 matching LAMP TABLES, glass tops, excellent condition, beautifully carved, $50 for 3. DA 4-6748. M

FREE (To be given away)

PUPPIES, 6 weeks old, part shepherd, part terrier. TE 5-3393. D

DOG, spayed female toy collie and cocker, 15 months old, needs room. R. F. FUNDER, OR 7-8775. D

PUP, 6 months old, black cocker, has had rabies shot, good with school age children, too rough in play with smaller ones, prefer someone with high fenced area. K. E. UNDERWOOD, FR 4-0348. D

COCKER PUPS, 6 weeks old, free, may be seen on weekends. C. S. TAYLOR, TO 4-3646. D

RENTALS OFFERED

SHARE HOME, working lady to share furnished home in Morningside Park. Call after 2 p.m. PL 4-8289. E

APARTMENT, furnished, upper duplex, 2 bedrooms, fireplace, plus penthouse and garage. Near beach in Manhattan. Daytime personnel only. $90. FR 4-1152. E

ROOM, furnished, $8 per week, near Northrop, near center Hawthorne. OS 5-5850. E

ROOM, private home, one or two men. ERNEST J. SANDOVAL, PL 6-1928. E

APARTMENT, nearly new, one bedroom, available Nov. 15, parking space in rear, Torrance. $60 unfurnished, water paid. MILDRED B. DAVIS, FA 8-7533. E

BEDROOM, large, in new apt., prefer night shift employee, $13.50 per week, OR 2-8365. E

HOME, 2-bedroom, unfurnished, fenced yard, walking distance to Northrop, $87.50 per month on lease. DON MANN, AX 1-0558. E

TRAILER, water, elec. and gas furnished, to single person, $35 per mo. Write to Northrop News, Box 718. E

BEDROOM, kitchen privileges, private home, Hawthorne. OS 6-9448. E

HOME, new, Lawndale, unfurnished. To be completed Dec. 1, two bedrooms, garbage disposal, 5 minutes from plant, $75 per month. AX 1-5029. E

SHARE HOME, furnished, with one woman, Redondo Beach, $10 per week. L. C. LEEDS, FR 5-1304. E

HOUSE, nice 2-bedrooms and garage, enclosed yard. AX 1-0016. E

SHARE HOME, Woman or couple to share 3-bedroom home, close to El Camino College and Northrop. OS 5-1765. E

SINGLE APARTMENT, living room, full kitchen, private entrance, furnished, early American decor, $60 month. EX 1-1121. E

APARTMENT, new deluxe one-bedroom, unfurnished, walking distance Plant 3, Crenshaw. Available about December 1, $77.50 month. PL 3-6461. E

BUNGALOW, one bedroom, El Segundo, service porch, large garage, Thermo. heat, garbage disposal, $70. R. W. FEENY, EA 2-0646. E

HOUSE, modern, unfurnished two-bedroom, single car garage, small lot, close to Northrop and shopping, no children, $75 month. Q. H. CUNNINGHAM, OR 2-5497, between 6-8 p.m. E

RENTALS WANTED

APARTMENT, bachelor, furnished, with cooking facilities, prefer Inglewood area, $50-$60. GLEN L. MAI, EX 6-8128. F

CHILD CARE OFFERED

CHILD CARE, my home, ages 3 to 5, $10 weekly, Southwest Park dist. JEAN F. BOWEN. Write to Northrop News, Box 713. G

CHILD CARE, day nursery, ages 3 yrs. and up. Close to school, fenced yard, balanced diet, naps if desired, licensed. OS 6-6566. G

CHILD CARE, ages 3 to 10 yrs., near schools, fenced yard, hot lunches, naps, 1 mile from Northrop, day or night shift. OS 5-7993. G

PERSONALS

IN APPRECIATION. We wish to express our deepest thanks to Northrop Aircraft, Inc. and all Norcrafters for sending flowers to our dad's funeral. E. K. HEDGES, EMYLU BOASE, MRS. E. L. HEDGES. L

IN APPRECIATION. To all my fellow Norcrafters for their kindness and generosity, I express my appreciation. Thank you. FREDDIE C. MUDGETT. L

WITNESS. Is there a Northrop employee who was a witness to the accident involving a 1955 Buick and a 1952 Ford at the intersection of Crenshaw Blvd. and Broadway at 6:45 a.m. on the morning of Nov. 14, 1955? T. R. CHILD, NE 8-6434. L

THANK YOU for the flowers, cards, and kind deeds from Departments 5515 and 5520 and the other many friends of W. R. (Jack) Teel. MRS. DOROTHY TEEL AND CHILDREN. L

Buy A Bond

EVERY ONE A CHAMP—! Impressive lineup of some of winners in 1955 NRC golf contests are pictured above. Included among nearly 75 trophy takers are winners of plant championship, low gross and low net flight winners, and individual league first, second and low gross, low net winners. See story this page.

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
Practice sessions, Gardena High School, every Wednesday evening at 6:45 p.m.

BIBLE STUDY, Roy Stahl
Meet daily, Plant I, east mezzanine conference room, 11:15 a.m.; Plant II, M.W.F. 12:00 conference room M1-B1, T.Th. 12:30 conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Wayne Chamberlin

BOWLING (nights), Garland Steiner
Christmas Tournament Dec. 27-30. Applications available in Personnel Activities.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Robert Carberry
Meet every other Friday evening, 7:30 p.m. Next—November 25.

CAMERA CLUB (nights), Gene Beck
Meet every other Saturday, 7:30 p.m. Next—November 26.

GEM AND MINERAL CLUB, Elmer Storm
Next—Nov. 30, 7:30 p.m.

GOLF, Andy Titus

GOLF (nights), Leo Baker
Christmas Tournament, Western Ave. Golf Course, December 28 and 29. Applications in Personnel Activities, Plants I & III.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—December 5.

MIXED CHORUS, Florence Graveline
Meet every Wednesday evening, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Bill Kappele
Meet 1st and 3rd Tuesday of each month at Annex, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Friday after work (1:30 a.m.)—Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—November 26.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays. Beginning class Sunday afternoons from 3:00 to 5:00 p.m. Last session of beginning class—November 27.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

SPORTS

The Northrop News

PRIVATE PARTY DATE NEARS

SEVEN DAYS REMAIN FOR TICKETS

There are only seven more ticket buying days until the all-Northrop Palladium Party.

Ducats are going fast, according to word received from Personnel Activities, and Norcrafters desiring tickets should contact their department clerks or—in outlying facilities—their Personnel Activities office. No tickets will be sold at the door.

The party, to be held this year on December 3, is the third annual. The tremendous success of the past two years' events have indicated another "sell-out" for this year's dance.

Dancing rhythms will be provided by Russ Morgan and his orchestra with "Music in the Morgan Manner" and special songs and entertainment are scheduled from the "Signatures", versatile singing and playing combo. (See picture, Page 6).

Norcrafters desiring dinner reservations should contact the Personnel Activities office as soon as possible. There are still a few dinner reservations available.

The scene of the event will be the beautiful Hollywood Palladium—newly decorated in time for the occasion—which has been reserved for Norcrafters only on this Saturday date. Ducats have been limited in order to give party goers comfortable dining and dancing space. The tickets have been allocated to departments in proportion to their personnel count, thus giving all Norcrafters equal chance to attend.

Linksmen by the Score Cop NRC Golf Awards

The 1955 NRC Golf season ended recently with a championship play-off which netted a low gross championship trophy for Ward Dennis and low net championship award to Joe Seman.

The players' roster also listed the names of the following winners of NRC Golf trophies, all champs:—

R. Pease, R. Marsh, F. McLarney, J. Quick, R. Worth, O. Knose, M. Sturgill, J. Musselman, H. Watt, O. Baumann, W. Dankowski, W. Osterberg, R. Beatty.

First place winners in Twilight League competition included: E. Laski, W. Osterberg, B. Young, M. Charlton, J. Milne, W. Conkling, H. Faught, F. Connors, C. Olsen, W. Clott, M. Bernards, R. Magin, R. Bradford, A. Kelso, W. Roberts, J. Kuster, A. Titus, S. Hollingsworth, F. Sarsar, G. Mees, J. Quint, B. Planck.

Second place league winners included: E. Ashby, M. Sturgill, S. Okada, D. Grabau, A. Richards, D. Dzamba, J. Armstrong, S. Ellison, R. Koehler, R. Pease, A. Litherage, W. Schmitz, R. Schnelker, P. Holliday, L. Johnston, M. Dixon, H. Horne, R. Worth, W. Lavoie, G. Ross.

Low gross and low net league winners were: V. DeCamp, J. Gibilisco, P. Stewart, P. Green, F. Connors, E. Cochran, R. Magin, A. Titus, J. Kuster, O. Booth, G. Woolpert, W. Young, R. Alger, P. Wierk, W. Steyer, S. Hollingsworth, R. Worth, B. Cook.

NRC Activities Gathering Momentum at Year's End

The next few weeks are promising to be among the busiest of the NRC year, a fact to which the following time table of coming events will attest:—

November 21 to December 16—Annual Purchase Prize Art Exhibit to be displayed in Plants I and III cafeterias.

December 3—Highlight of the year. Annual NRC Private Party at Hollywood Palladium. Tickets now on sale.

December 15 — Judging of annual Doll Dressing contest. (There are still a few dolls available for dressing in Personnel Activities offices, all facilities.)

December 17 — First NRC Children's Christmas Parties. El Segundo facility children at 9:00 a.m. at the Imperial Theatre. Palmdale - Edwards, Palmdale NRC Clubhouse.

December 18 — Hawthorne NRC Children's Christmas Party, NRC Clubhouse, 1:00 to 5:00 p.m. Toys, candy, ice cream for all children. Anaheim Children's Party on same date, Anaheim Union High School, 1:00 to 3:00 p.m.

December 22—Christmas Party for Ontario children at Ontario YMCA, 7:00 p.m.

December 28-29 — First annual Christmas Golf tourney. Full handicap, 36 hole medal play. Tee time 8:00 to 11:00 a.m. Entry deadline December 16, $4.00 entry-greens fee, blanks available Personnel Activities office. NRC and merchandise awards to winners.

December 27-28-29-30—Third annual NRC Christmas Bowling tourney. All bowling 10:00 a.m. to 6:00 p.m. at 20th Century Bowl, 5721 South Western Ave. All classes, $2.50 fee per event. Entry deadline December 2.

Desert NRC Welcomes V-P McCain

By HAL HUNSBERGER
President
Northrop Recreation Club

A mighty welcome to the ranks of the NRC Council was given Marshall McCain on November 19. Marshall, newly-elected Palmdale NRC vice-president, was duly installed in office at one of the biggest and best parties ever seen around the desert area.

Scene of the "Veep's" Inaugural Ball was the new Palmdale NRC clubhouse. The ball—first large-scale event to be held in the new building — celebrated two major highlights. In addition to the inaugural ceremonies the party served as a dedication for the recently completed clubhouse.

Top speakers for the evening included Northrop President Whitley C. Collins; John B. Clark, director, Industrial Relations; Tom McCracken, Palmdale base administrator; and Bob Rolfe, Edwards AFB base administrator. Honored guests included K. P. Bowen, vice-president, Manufacturing and Materiel; Robert Miller, vice-president, Administration; and several top city officials from Palmdale and Lancaster.

PAY DIRT—. Winners of Ontario NRC Prospectors' club annual mineral and rock collection display are, from left: Val Koch, third place; Club Comish Bob Weiller, first place; Chet Pool, second place. Group took NRC trophies for wins. Club totals sixty-two.

THE Northrop Scene BY DAY AND NIGHT

Imported Deep Freeze

ARCTIC-BASED sharpshooters participating in USAF's world-wide rocket meet at Yuma recently found relief from sizzling temperatures by constructing own "Arctic Circle". Cool HQ was shared by champ teams from Northeast Air Command and Alaskan Air Command. Reps of latter organization are shown with Jackie Forman, queen of rocketry meet. AAC team members are Captain S. F. Miller, First Lieutenant D. H. Deans, Captain Jack Gillette, Colonel R. D. Hubbard, and First Lieutenant William Evans. Both AAC and NEAC are assigned F-89D Scorpions. Los Angeles Times began series on Arctic Sunday (see pictures on page 1).

In Scouting Tradition

RED FEATHER AMBASSADORS—. Junior Norcrafter Girl Scouts helping in Community Chest drive this fall are: Anne Atkinson, daughter of John M. Atkinson, Experimental Flight Test; Barbara Hammer, whose mother is Marian Hammer, Public Relations; Nancy Murphy, daughter of Stanley Murphy, Missile Planning. Girls speak before civic groups, radio, TV.

SCHOTT INAUGURAL—. Recent El Segundo facility NRC inaugural ball honored Tom Schott, newly-elected NRC vice-president. Pictured, from left: Larry Littrell of El Segundo Industrial Relations department; Harry Clark and Charles Boyle, general supervisor and manager, respectively, Personnel Activities and Services Administration; Tom Schott. Scene was Mayflower Ballroom. VP choice was facility's first.

Private Party Capers

SIGNATURES—. Pictured is versatile combo which will assist maestro Russ Morgan in providing music and entertainment at December 3 annual Palladium Private Party for Norcrafters. Tickets are now on sale at $1 each from department clerks —and they are going fast. Dinner reservations are being taken at Personnel Activities. (See story on page 5 of this issue.)

Training In Reliability

OPERATIONAL EFFECTIVENESS of Northrop airplanes increases as result of training classes like these, which pass on high-level skills and know-how to Norcrafters. This particular class is on electrical bonding—the connection of electrical assemblies in airplane into integral unit. Class members shown, representing various departments in Factory and Quality Control, are: Harlan Hoover, Wayne Anderson, Leonard Crownover, E. L. Beachy, M. P. Spencer, W. L. Earley, H. T. Torbette, R. L. Kelley, G. A. Fowler, J. B. Nikodem, Guy Kirby, Sam Cawlfield, Dave Heaps, Ollie Allen, B. T. Billings, W. G. Kierath, Ruth Miller, N. L. Westbrook, Jerome Stegman. Instructor is R. W. Hiett, jr., of Industrial Training Administration, whose Electronics section, under Clarence Stine, is responsible for this training program. Engineering division, Materials and Process Control cooperate in lining up the curriculum to meet high specifications.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, December 7, 1955

Children's Parties

(See Story, Page 2)

PENSION PLANS IMPROVED

EARLIER VESTED INTEREST, LIBERAL BENEFIT FORMULA

Northrop Retirement Plan—made effective on August 1, 1952, at no cost to Norcrafters—has been liberalized by action taken at the recent annual stockholders' meeting. The improvements are not effective until the approval of the U.S. Treasury Department and Department of Defense is obtained. Action to obtain these approvals has already been initiated.

A beneficial increase in the method of figuring future service retirement income credits, and provisions for giving participants in the plan an earlier vested interest in their retirement benefits feature the amendments.

For each year of service beginning August 1 of this year, Norcrafters can compute their future credits by adding $1.75 to one and one-half per cent of their pay in excess of $350 per month. Formerly the corresponding figures were $1 and one and one-quarter per cent over $300 per month.

Retirement credits earned prior to August 1, 1955 are calculated with the old formula.

Labor Relations Administration, which administers the retirement program, has provided an example (shown on page 2) for Norcrafters' use in figuring their own credits.

The second facet of the amended plan provides a deferred retirement income beginning at age 65 for any participant who terminates for any reason other than death, and who has attained the age of 45 with at least 10 years' continuous service. Before amendment the plan provided these rights—commonly called "vesting"—at 55, with 20 years' service.

The deferred income gained at the ages preceding normal retirement age of 65 is on a sliding percentage scale. Thus, the Norcrafter who leaves the company for any reason at 45 with ten years of continuous service is entitled to receive, at the age of 65, 50 per cent of the retirement income he has built up. At 46, with at least 11 years service, he gets 60 per cent when he reaches 65; at 47, with 12 years, 70 per cent; and so on until he reaches 50, with 15 or more years of continuous service, when he has earned 100 per cent of the retirement benefit — ac-

(Continued on Page 2)

INGENIOUS IDEA proposed by Dick Adair and J. W. Allen, of Plaster Shop, brought them Suggestion Award check for time-saving, accuracy-increasing operation. Bob Lieber, right, section superintendent, Tool Fabrication, presented check. From left: Cecil Callaway, Suggestion Award supervisor; Adair and Allen; and Frank Rosenstiel, night foreman, 5437.

Suggestion Awards Mount To Quarter-Million Pace

Scores of Norcrafters last month continued to reap rewards from the Suggestion Award plan which annually contributes approximately a quarter of a million dollars in direct hourly savings.

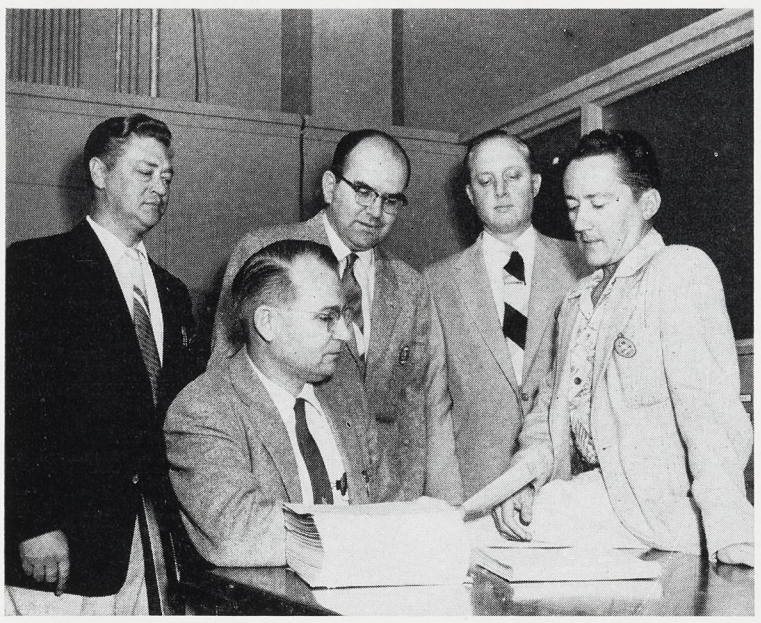
Among the recipients of cash awards for usable ideas were J. W. Allen and Dick Adair, Plaster Shop Norcrafters whose suggestion to use layout bars proved, in a year's operations, to be a sound and worthwhile contribution to the company's production effort.

Formerly it was necessary to read and set up scales in layout on mockups, Plaster Shop spokesmen said. Adair and Allen came up with the idea to use precision bars on either side of the layout tables for accurate erection and rigging of templates.

The layout bars, used with spacer blocks, provide permanent—and highly accurate—references throughout the mock-up construction phases. Not only is human error eliminated, but valuable Scorpion and missile production time is saved.

Proof that payoff ideas come in indirect fields of endeavor, as

(Continued on Page 3)



SYMBOLIC SAVING in paperwork is demonstrated on table as Vern Parker presents Bob Mason, right, with Suggestion Award check for idea on routing castings. Observing presentation: C. A. Peterson, general supervisor, Receiving; Dan O'Halloran, assistant chief inspector, Warehouse and Offsite Inspection; and John States, assistant Warehouse superintendent. Idea has benefited many departments.

Traditional Yule Break Announced

The pleasant, traditional year-end holiday was announced to Norcrafters via bulletin at the end of November.

Providing a full leisure week between Christmas and New Year's for personnel to enjoy with their families, the customary with-pay vacation begins at the end of shifts on Friday, December 23. It ends with the beginning of Tuesday, January 3, shifts.

All personnel on the payroll as of December 24, and not on leave, are eligible; 40 hours' pay at straight time rates is paid the vacationing Norcrafters.

To make up the one day's pay which might otherwise be lost during the week beginning January 1, the plants will be in operation on Saturday, January 7, as a regularly scheduled 8-hour straight time work day.

Vacation checks, as well as the checks covering the work week ending December 18, will be distributed on Thursday night, December 22, to night and morning shifts. Day shift personnel receive theirs on the following day, Friday.

Checks for the work week ending December 25 will be distributed on Thursday and Friday, January 5 and 6. On these dates paychecks for hourly personnel who work during the holiday week will also be distributed. (Hourly Norcrafters who work in that period receive regular pay plus vacation pay.)

Fireproofed Trees Only For Plants

Norcrafters bringing into the plants the traditional trappings of the holiday season — gaily-decorated Christmas trees—have been cautioned by an all-divisions, all-departments bulletin to buy only fire-proofed trees and decorations.

Press of normal activities makes it impossible for the Maintenance department to flameproof any trees this year. Guards at the gates have been instructed to look for certificates of fireproofing on all trees brought into the plants, and to deny entrance to any without the certificate.

No candles will be permitted as tree lights. All lights should be disconnected at the end of shift. The trees will be collected by Maintenance for disposal at the end of shifts on December 23.

TEXT OF AMENDMENTS TO RETIREMENT PLAN

Increase in Amount of Retirement Benefits

"For each full month as a participant subsequent to 31 July 1952 and prior to 1 August 1955 or his Normal Retirement Date, which ever first occurs, a Participant shall be entitled to an annual amount of future service retirement income equal to the total obtained by adding $1.00 to 1 and ¼ per cent of the Participant's Compensation in excess of $300 during that month. For each full month as a Participant subsequent to 31 July 1955 and prior to his Normal Retirement Date a Participant shall be entitled to an annual amount of future service retirement income equal to the total obtained by adding $1.75 to 1 and ½ per cent of the Participant's compensation in excess of $350 during that month. 'Full month' means 15 or more calendar days of Continuous Service in a calendar month.

Liberalization of Vesting Provisions

"1. If the employment of any Participant shall be terminated for any reason other than death after he shall attain age 45 and shall have completed at least 10 years of Continuous Service but prior to his Normal Retirement Date, such Participant shall be entitled to receive a deferred retirement income, commencing at his Normal Retirement Date, consisting of the applicable percentage, as set forth in Paragraph 2 of this Article 5, of the retirement income accrued for Continuous Service rendered up to the time of such termination of employment.

"2. The percentages of vesting which shall be applicable for the purposes of Paragraph 1 of this Article 5 are as follows:

Age Attained	Years of Continuous Service	Percentage of Vesting
45	10	50
46	11	60
47	12	70
48	13	80
49	14	90
50 or above	15 or above	100

"The applicable percentage of vesting is the highest percentage as to which both age and Continuous Service requirements have been attained. As an example: a 50 year old

(Continued on Page 2)

Palmdale Section

PRIME SOCIAL EVENT to date at Northrop-Palmdale was NRC v-p inaugural and Clubhouse dedication. Among many Antelope Valley dignitaries hosted by Northrop were U. S. Congressman and Mrs. Edgar W. Hiestand, here being greeted by Sam Ponton, Northrop Personnel Activities. Hiestand spoke on program.

BRIGADIER GENERAL J. Stanley Holtoner, left, commander of Edwards Air Force Flight Test Center, and Colonel Horace A. Hanes, right, director of Flight Test, Edwards, were other prominent attendees. They are shown in conversation with Northrop President Whitley C. Collins, center . . . Northrop Cafeteria staff, headed by Fred Wolfe and Johnny Korn, cheffed.

NEW PALMDALE NRC Veep Marshall McCain, center, was inaugurated. He is shown with Mark Berry, left, out-going v-p (with plaque for outstanding service); Edwards NRC Vice-president John O'Connor (standing); NRC President Hal Hunsberger, right.

CHILDREN'S YULE

ALL FACILITIES PLAN PARTIES FOR KIDS

The old gentleman with the red suit and white whiskers is headed this way!

In keeping with the Christmas tradition at Northrop the NRC has again booked the jolly gent for the annual round of NRC Children's Christmas parties at the various facilities.

There will be three children's Christmas parties on December 17. LAX has scheduled its party from 1:00 to 2:00 p.m. in the LAX facility recreation area. Santa will arrive by air with his load of gifts and refreshments for all the youngsters. The El Segundo facility juniors will be feted at 9:00 a.m. at the Imperial Theatre, 3180 West Imperial Highway, Inglewood. Palmdale and Edwards AFB youngsters will meet their North Pole visitor at the Palmdale NRC Clubhouse on the same day from 2:00 to 6:00 p.m.

Sunday, December 18, is the date scheduled for the Hawthorne NRC Children's Christmas party. The NRC Clubhouse doors will be open from 1:00 p.m. until 5:00 p.m. There will be toys, candy, ice cream, and a talk with Santa for all children.

The Anaheim Division's Children's Christmas party will be held on the same date—December 18—at Anaheim Union High School from 1:00 until 3:00 p.m.

Santa will finish his rounds on December 22 when he visits Ontario facility juniors at their annual Christmas party. The Ontario event will begin at 7:00 p.m. in the Ontario YMCA.

Retirement

(Continued from Page 1)

cumulated to that point — payable at 65.

The benefit, of course, continues to grow if he stays with the company.

The schedule of vesting is included in text of amendments (beginning on Page 1).

The company also announced an amendment governing participation in the plan. This applies only to personnel hired after November 17, 1955, and provides that such personnel are not eligible to participate in the plan if they are over 60 years of age on the date of hire.

It also provides that a minimum of five years of continuous service with the company is required before any benefits are payable to such personnel.

The booklet detailing the plan is being revised to reflect the new amendments, and will be distributed shortly following its publication.

Other terms of the plan are unaffected by the amendments, although the company is continuously studying the program to provide best benefits possible for the dollars available.

The retirement plan is provided free to Norcrafters, with all contributions made by the company. Currently, the company puts into the fund that insures regular payment of retirement benefits approximately three and one-half million dollars per year. About 220 senior Norcrafters are on the current retired list.

Example for Norcrafters To Figure Retirement

Under the original plan, effective August 1, 1952, monthly retirement benefits in the Northrop Retirement Plan were computed by adding $1 to 1¼ per cent of monthly earnings over $300 on that date, and multiplying the total by the number of years and fractions of years worked for the company. (Service attained before the participant was 23 years old is not considered).

Beginning with August 1, 1955, the computation uses $1.75 added to 1½ per cent of monthly earnings over $350.

For example, Norcrafter Joe Doakes, on December 1, 1955, was 45 years old, earning $500 monthly. He had been working for the company for ten years and four months.

Joe's retirement benefit, as figured up to December 1:

$1 plus 1¼ per cent times $200 (the excess over $300)—$2.50—times 10 (years' service to August 1, 1955) equals $35.00. This figure includes credits earned to August 1, 1955, and is calculated under the old formula.

From August 1 of this year the new formula is effective and thus far Joe has $1.75 plus 1½ per cent of $150 (the excess over $350)—$2.25—times one-third (service in terms of years after August 1). Total: $1.33.

This figure, added to the previously-earned $35.00, makes $36.33—the monthly retirement benefit Joe has earned to date.

Should Joe leave the company at this time, under the vesting provisions recently adopted, he has the required 10 years' continuous service and the 45 years minimum age to have a vesting of 50 per cent in his retirement benefit. At 65, then, Joe would receive one-half of the $36.33 figure, or $18.17 monthly, from Northrop.

However, should Joe stay with the company until his normal retirement age, his benefit continues to build up. Using the new formula, it becomes apparent that his future monthly benefit grows at the rate of four dollars per year, or $80 with the 20 years' added service.

This, added to the $36.33 he had built up by 45, as demonstrated, would make a monthly retirement benefit of $116.33, exclusive of Social Security payments.

MC DECEMBER 9 MEETING PLANS INCLUDE GIFTS

Northrop Management Club members planning to attend the organization's December 9 meeting at the Rodger Young Auditorium have been urged to bring to the meeting inexpensive, gift-wrapped presents suitable for distribution to needy aged.

Educational Chairman Ralph Hampton has announced that arrangements have been completed with the Welfare Planning Council to distribute the gifts, which can be in the nature of toiletries, tobacco, scarves, and other gifts of that nature. Packages should be labeled for men or women.

TEXT OF AMENDMENTS TO RETIREMENT PLAN

(Continued from Page 1)

Participant with 11 years of Continuous Service is entitled to a 60% vesting.

"3. Any person entitled to a deferred retirement income under the preceding paragraphs of this Article 5 shall apply to the Company in writing, not earlier than 3 months before his Normal Retirement Date nor later than 6 months thereafter, for the payment of such income giving the address to which the payments shall be sent. Failure so to apply shall cause a forfeit of all rights under this article 5.

New Requirement of at Least Five Years of Service to be Eligible for Benefits.

"Each employee hired subsequent to 1 August 1952 and prior to 18 November 1955 shall be eligible to become a Participant on the first day of employment as an Employee provided he has not passed his 64th birthday. Each employee hired subsequent to 17 November 1955 shall be eligible to become a Participant on the first day of employment as an Employee provided he has not passed his 60th birthday, but shall not become entitled to receive any retirement income or optional benefits unless he completes a minimum of 5 years of Continuous Service."

Northrop News

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BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — Wednesday noon one week before publication.

FOR SALE

FORD 1941 business coupe, best offer. A. M. JANASIK, FA 8-0612. A

BUICK '55 Century Riviera, loaded, $2595. GEORGE C. O'BANION. EA 2-2756. A

FUR COAT, black never worn, $40, full length size 16. EX 5-0575. A

PACKARD 1947, 4-door sedan. New 2 yr. battery, $100. JOE O. ROGERS. PL. 9-0719. A

VENETIAN BLINDS, six 36" wide, one 42" wide, practically new. $25. J. B. McMANUS, FR 9-9926. A

REFRIGERATOR Servel; full size flat top STOVE; Bendix Automatic WASHING MACHINE; $135 for all three. M. H. DAZEY, FR 5-5298. A

CADILLAC, 1948 convertible, Hydra-Matic, electric seat and windows, $875. ROBERT De SANDO, PL 5-5461. A

BUICK '55 Century Riviera, power brakes, safety belts. Sold for $3875, $2800 or best offer. BARBARA PENKE, FA 8-1628.

CHRYSLER 1947 convertible needs new top, $100. J. W. FINK. FR 2-7371. A

BICYCLE, boy's 26" lightweight Schwinn. PL 2-9597. A

DeSOTO 1952 4-door sedan, $750. R. C. MOORE, FR 2-6844. A

COINS, one 1887 Queen Victoria Jubilee Gold Sovereign, proof condition and one 1887 mint condition Half Sovereign, $50. R. DARLEY, OR 2-7871. A

CLUB CHAIR, large; Singer SEWING MACHINE, power model 31-15; Kirby VACUUM CLEANER and floor polisher, complete, all attachments. J. F. LEE, OS 6-0913. A

BICYCLE, boy's, full-size, excellent condition, generator, front and rear lights, rear parcel rack. PL 9-7917. A

PIANO, Apollo upright, good condition, $40. D. F. CRAIG, FR 4-4179. A

CHRYSLER '42 Club Coupe, needs work, $50. BOB ZEPEDA. Jr., FR 2-9504. A

SAILING SLOOP, 18' L.O.A., two bunks, food locker, 5-horse outboard auxiliary, sails, jitterbug design, $675; FORD PARTS, exhaust headers, 1941-1948, $7; flywheel, 21 lbs. 1932-1948, 9" or 10" clutch, $8; H&C ¾ race cam 1932-1948, $12; set of Johnson adjustable tappets, $8; extra capacity radiator, 1941-1948, $20; short block, 24 stud, 1938, needs rebuilding. $10. Will sell lot for $58 and include many useful auto parts free. ARTHUR ECK. DA 9-3739. A

REFRIGERATOR, Hotpoint, 6 cubic ft., perfect condition, $75. PL 9-5719. A

HOUSE. 3-bedroom, Garden Grove, 2-car garage, w/w carpet throughout, garbage disposal, automatic dishwasher. Fenced lot 77'x117'. Payments $67 month include principal, interest, insurance. $2300 equity. ME 3-6544. A

COWBOY SUIT, Roy Rogers, size 10, black and red embroidered shirt, perfect condition, $5; girl's COAT, navy wool, red velvet collar, handmade, age 4-6, $5. J. BUTLER, OR 2-1570. A

DRAPES, floral, for 12' window, desert tan background, used only 6 wks., cost $98, $60, drapes lined. W. E. ANDERSON, TO 3-0637. A

BOAT, 14' Starline deluxe 1955 outboard runabout, all Fiberglasr; plus custom trailer, $500. J. B. YAPP, FR 9-3946 after 5 p.m. A

CHRYSLER 1952 Saratoga Town & Country wagon, power brakes, $1425 or best offer. D. L. STEPHENSON, FR 5-5371. A

MERCURY 1953 Monterey coupe, overdrive, Mallory ignition, $1700. BOB CALOF, OR 1-3229 after 5 p.m. A

RADIANT HEATER, $10; boy's 20 in. BIKE, $30, double cross bar; metal BED, $5. ANTHONY J. WAGNER, OS 6-8210. A

BABY BUGGY; PLAYPEN; JUMPER SEAT; BATHINETTE; SCALES; BABY TENDER. FR 4-8608. A

FUR COAT, short, like new; several name SUITS, DRESSES, etc., sizes 12 and 14. PL 4-9942 or PL 5-5149. A

DRAFTING MACHINE Charles Bruning type, 30" arms with two 18" metal scales, $65. G. R. CLARKE, FR 9-5601. A

LIVING ROOM SET, 2 pc.; Frigidaire ELECTRIC STOVE; electric MANGLE; small CORNER CABINET, G. M. BAKER, FA 8-7006. A

FORD '51 V-8 convertible, overdrive, $700. W. FLETCHER WE 5-2356. A

RANGE Magic Chef, good condition, $25; Maytag WASHER, wringer type, $25, both $45. G. E. KEY. PL 5-2874. A

CLOTHING, 2 nylon dresses, child's size 10 like new, cost $12 and $15, $4 each; lady's size 16, maroon wool coat, fur collar and cuffs, like new, cost $80, $7.50; lady's size 10 or junior size 11 formals, blue net ballerina length, pink lace & net, ballerina length, $4 each; bright red full length, $5. GEORGE B. LANG DA 9-4016. A

BICYCLE, Schwinn, girl's 20", $15. W. D. PRICE, FR 2-6728. A

SPACE HEATER, Gaffers & Sattler, 20,000 BTU per hr., $10. R. D. KLEIN, PL 1-9698.

FOR SALE

TV 21" Motorola hand rubbed mahogany console, double doors, excellent condition, $150. J. H. WINTERS. OS 5-2921.

FURNITURE, complete bedroom set, $85; dining room set, Duncan Phyfe, $100; blonde dinette set, includes table, 4 chairs and 2 extension leaves, $20. Day NO 2-2927, evenings NO 2-0423. A

CHEVROLET 1936 coupe,, $75. L. R. BLACK, OS 5-8127. A

HOUSE TRAILER, 1949 Model, Kit Mfg. Co., all metal exterior, $395; ELECTRIC RANGE, Hotpoint, not new but in excellent condition. $75. OS 5-8849. A

WASHING MACHINE, G.E. wringer type, good condition $25. H. W. HENDERSON. EX 6-9082. A

BATHINETTE, Trimble, all aluminum, foot control, tray, $9. REYMUNDO MARTINEZ, NE 2-7328. A

HOUSE TRAILER, 1941 National 24', $450, good condition; 1951 Bel Aire CHEVROLET, Power Glide, $800 or best offer. R. E. DAWKINS, EA 2-4572. A

SLIDE PROJECTOR, La Belle 500 watt automctic, case, two extra slide magazines, $75, excellent condition. CURTIS D. CRAIG, OR 4-5999. A

VACUUM Westinghouse upright and attachment. ADRIAN OUWERKERK, OS 6-3886. A

MERCURY 1950, club coupe, overdrive, best offer. $500 minimum. R. G. PAXMAN. TO 1-5185. A

NASH RAMBLER 1952, overdrive, $650. WILLIAM TOPJIAN. Write to Northrop News Box 801. A

SERVICE STATION, master lease, fully equipped and stocked, ready to go. W. J. WISDOM, FR 2-6746. A

PICKUP, 1937 Plymouth, recently overhauled, $125. R. W. VOGEL, DA 9-1705.

MOTORCYCLE. 1950 Matchless, recently rebuilt. BOB MULLICAN. GA 9-3243. A

DINETTE SET, genuine Philippine mahogany, table. 4 chairs, cushions upholstered in natural color leather, $25. D. M. MAPLE, OS 6-4968. A

HORSE TRAILER, 4-wheel double, like new, no trade, blue and white, Philippine mahogany panelled interior. $1295. ALICE HOLTKAMP. EX 8-7305. A

MATTRESSES and BOX SPRINGS for twin beds, three sets, $10 per set; Philco REFRIGERATOR. 7.5 cu. ft., like new, $75. M. SETZER, EX 8-7814. A

FORD 1951, four-door, Fordomatic, $800. EDWARD BURD, PL 6-9751. A

LOVE BIRDS, 2 female and 1 male, peach face, South African, aviary, $20. BRUCE GENTRY. OS 6-2113. A

DISHWASHER Hotpoint, 3 years old, excellent condition, $125. SUE McGREW, OS 5-8093. A

STOVE. Wedgewood, like new, $80. STEPHEN S. YSLAS. AX 2-8996. A

DRY CLEANING EQUIPMENT. Complete for store. PL 6-4468. A

PONTIAC 1942 2-door sedan, $45. AX 3-7764 or AX 1-8615. A

FLOORING. 1500' hardwood oak, ¾"x2', used, clean, good condition, $115. EARLE WHITNEY, DA 4-9817. A

WASHING MACHINE wringer-type with automatic timer and pump, perfect condition. $59. WAYNE R. WATKINS, FR 5-2439. A

ENGLISH BULLDOG, male. A.K.C. registered pedigree, 14 months old, $100. H. H. MATHEWS FR 9-6289, after 5 p.m.

DRAFTING SET. K&E Mercury, $10; bridesmaid's DRESS, hat and mitts, peach, size 12, $10; STROLLER, $3. C. A. BROOKS, FR 2-7744. A

HENRY J, 1951 model, best reasonable offer; BOAT AND TRAILER, 13 ft. plywood boat, 4'x8' box trailer rigged to haul boat and camping equipment, $225 for both. E. A. "JIM" TEAGUE. Write to Northrop News, Box 815. A

DESOTO, 1950 custom club coupe, Gyromatic, must sell, $595 or best offer. R. G. ECKLES, OR 1-5046. A

CHEVROLET, 1954 4-door station wagon, $100 for my equity and take over payments. DOUGLAS W. BEAZLEY, DA 4-9007. A

BOOKCASE HEADBOARD, imitation blonde wood CHEST OF DRAWERS, BOX SPRING AND MATTRESS, almost new, paid $119, sacrifice $75 or best offer; DESK LAMP AND CHILD'S TRICYCLE, best offer over $5. HANNAH M. PURYEAR, EX 9-3806. A

PHOTOGRAPHIC EQUIPMENT: all chrome Komine pan head, $3; Kodak projection print scale, $1; lab thermometer 12", $3; various chemicals, film clips, etc. to highest bidder. HO 4-7747, around 3 p.m. A

HOUSE, 3-bedroom, 1½ bath, tile kitchen and bath. 1100 sq. ft., $11,500, $2500 down. ROY F. KALEY, WI 7-2593, Palmdale. A

HOME, two bedroom, Manhattan Beach, hardwood floors, large fenced lot, patio, full price $9500, min. down 10%. FR 4-4282 evenings. A

FOR SALE

DINING TABLE, 4 CHAIRS, Monterey style; redwood CHAISE LOUNGE AND CHAIR, 4 steel LAWN CHAIRS, Roll-a-way BED; ELECTRIC TOASTER, Toast-o-Lator, price open. S. L. PETERSON, PL 6-8095. A

DEEP FREEZE, 21½ cu. ft. chest type, storage compartment, excellent condition. 2 years. old. OS 5-7993. A

VIOLIN, and case, good condition, cheap. M. K. GOUKER. Write to Northrop News, Box 812. A

FORD, station wagon. 1954 Country Sedan, Fordomatic, $1895. W. E. BROONER, FR 9-8048. A

OUTBOARD MOTOR, Mercury Mark 20, less than 15 hours of operation; ELECTRIC TRAIN, Lionel, 0 gauge, freight and work train, 20-wheel locomotive puffs smoke, whistles, automatic unloading coal car, milk car, automatic switches, extra track, scenery. PAUL FLAMING. OS 6-1985. A

ANTIQUE BED and marble top DRESSER, carved walnut with burl, good condition, $200. TE 2-7798. A

TYPEWRITER, BANJO, UKELELE, Spanish GUITAR; WAFFLE IRON; Tenor GUITAR; automatic TOASTER. J. H. BUSH, OS 6-6449. A

MODEL "A" FORD, coupe, good condition, $100. L. A. WILLIAMS, FA 8-4938.

CAMPING TRAILER, 14 ft., sleeps five, Terry Rambler, $575. E. C. SWART, FR 2-9472, after 5 p.m. A

CHEST, DESK AND STOOL, twin size BED, $20. BERT ST. GEAN, GR 2-2346.

HOUSE TRAILER, 14', aluminum body, $475. ERICK LENK, OS 6-8816. Sat. or after 6 p.m. A

HOUSE, 7 rooms, 3 bedrooms, fireplace, wired for electric stove and dryer, basement with furnace, newly painted, near Vernon and Western, $12,500, terms can be arranged with $3000 down; 1951 CADILLAC, Coupe De Ville, new white wall tubeless tires, $1700; 1955 BUICK, 2-door Century Riviera, duals, power steering and brakes, son's car, drafted, $2800, $650 down, balance GMAC $2150. L. A. WIMER, AX 1-8765. A

DINETTE SET, wood, 4 chairs, used but good condition. $25. W. F. LEMASTER, OS 6-9579. A

TOOLS, boring head with three shanks —straight, Morse and Brown, shaper tapers, 1 pair vee blocks, hardened and ground, 2 pair ½"x1"x8" parallels, 1 pair 4" toolmaker's clamps, 5" sine plate. W. R. HOFMANN, NE 1-5007. A

HOME. 3-bedroom, Westchester, recently redecorated, fenced yard, two blocks from schools, shopping, transportation, includes drapes and curtains. $15,450. STANLEY R. MURNANE, OR 2-2634. A

AUTOMOBILE BATTERY, long type 17 plate, guarantee still good. fit Pontiac or Buick, $9; Lewyt VACUUM CLEANER, excellent condition, includes attachments, $25; laundry tub SINK, $10. DAVID GREENE, OR 7-0698. A

STEEL GUITAR, Fender, with amplifier, very good condition, $70; Holly dual wall FLOOR FURNACE, 32,000 B.T.U., used 2 seasons, $40. CARL F. WATSON, LO 7-3222, after 5 p.m. A

UKELELE, Martin, and case, $15, cost $42; KODAK Vigilant, $10; O'Keefe & Merrit 32" STOVE with grill, $35; Victor 16mm MOVIE CAMERA, f1.5 lens, $65; Craftsman ¼ h.p. PAINT SPRAYER outfit, $20. DENVER HOWARD, OS 5-5829.

CAMERA, 35mm, $10; ROD AND REEL, Monoreel, glass rod, $20. J. G. HARKEY, LO 5-2497, after 6 p.m. Saturday. A

FORD TRUCK, ½ ton pick-up, 6 cylinder, special bumpers, all steel bed, 1946, $295. FR 2-4673. A

PONTIAC, 1950 2-door, Hydra-Matic, $475. C. WOOLUMS. PL 1-0359 or PL 3-7484. A

PIANO, Armstrong full size baby grand, with seat, $215 down. $450 total, Bank of America financed, paper can be transferred. G. J. KENNELLY. Write to Northrop News, Box 811. A

GAS RANGE, Magic Chef C. P., full size, oven, broiler, minute minder, light, good condition, $45. STANLEY J. NAWOJ, OR 4-3291, after 5 p.m. A

WASHER, Maytag, wringer type, automatic pump, $25; fully automatic Southern Electric DEEP FRY COOKER, 5½ qt., like new, make offer. E. GRIFFIN, OS 6-3862. A

ADDING MACHINE, Underwood Sunstrand electric. $150. DOLORES MITCHELL. VE 9-7656. A

MINK COAT (Jap), full length, shawl collar, size 10-12, perfect condition, sacrifice, $175. HO 7-4655. A

HOME, 2-bedroom, cement block, lot 51x160, fenced, Venetian blinds, cooler, landscaped, granite drive, 8'x12' work shop, 1 mile from elementary school and Palmdale shopping center, $1500 for equity. O. J. CARVER, JR. Write to Northrop News, Box 809. A

TENNIS RACKET, Cortland, cover, press, 1 Wilson ball, used 3 times, cost $14, $7.50. JOSEPH N. HARMON, TE 5-3221.

LADIES' RING, large sapphire, two small diamonds, $25; ladies' LAPEL WATCH, imported cupid design, in rhinestones, $15; man's heavy OVERCOAT, navy, size 42, $10; ladies' SILVER FOX STOLE, fine skins. $75. GR 7-1539. A

STEEL GUITAR, Hawaiian amplifier, used only 3 months, $80 cash. ANDREW E. TITUS, OS 6-8997. A

CAMERA, Kodak, 35mm., case, flash, filter, light meter, like new, original cost, $80.50, $35. PL 2-9516, days. A

In Engineering, Factory— Opportunities Beckoning

Excellent opportunities exist for Norcrafters in the Manufacturing and Engineering divisions, a notice from the Personnel department indicates.

For existing openings in the Loft and Template department, the company is seeking Norcrafters who may have experience or education in the fields of blueprint reading; basic shop mathematics, mechanical drawing, or pre-Engineering subjects.

Qualified Norcrafters can expand their knowledge of aircraft in the field of flat pattern layout, template making, and lofting on new and interesting projects, the Personnel announcement states.

The Engineering division also has excellent openings for draftsmen, technical computers, and engineering assistants for personnel who are not now employed in a technical field, but who qualify with two years of engineering college training or equivalent practical experience.

The opportunity is an unusual one, which can lead the qualified into many interesting and diversified projects connected with the Engineering division.

Individuals who meet the basic qualifications mentioned should contact their immediate supervisors for permission to investigate the job openings through the Transfer section of Personnel—extension 604 or 646.

Awards . . .

(Continued from Page 1)

well as in the shops, was illustrated by the award paid to Bob Mason. Warehouse and Offsite Inspection.

Bob noticed, in his daily rounds, that vendors making castings for the company billed Northrop for the entire order while shipping the castings, as required, to an X-ray laboratory for inspection. Prompt payment is generally made to take advantage of discount provisions.

When rejections occurred, it became necessary for preparation of a considerable volume of paperwork to arrange for credit for castings not received.

Mason's suggestion resulted in billing only for castings actually delivered, not only eliminating paperwork required in straightening out the account, but also allowing prompt reorder of missing material, eliminating shortages.

FOR SALE

BICYCLES, one boy's, one girl's, 26 inch, Firestone, good condition. both for $25 or $15 each. DICK CARMICHAEL, TE 3-0346. A

BIKE, Schwinn, boy's, 24". 3-speed, hand brakes, good condition, $25. B. P. BRADY, DA 9-5646. A

POWER MOWER, 18", Sears, just overhauled, good condition, $65. R. N. WORTH, EX 8-5442. A

FORD. 1949 club coupe, customized, decked. $395 R. W. VOGEL, DA 9-1705.

BICYCLE, girl's, 16 in., 2 wheeler, $10 or make offer. M. J. FAYRWEATHER, AX 1-9010. A

REFRIGERATOR, Hotpoint, new, original price $170, sacrifice half price; also apartment size STOVE, Western Holly, $20. FR 4-5763, after 5 o'clock. A

WASHING MACHINE. Kenmore, wringer type, like new, $40. C. C. BESEKE. Write to Northrop News, Box 808. A

HOUSES, 3 bedroom, Reseda, large corner lot, air conditioned, garbage disposal, stove, refrigerator, extras, $2000 down; 2 bedroom and den, large lot, beam ceilings, fruit trees, $2000 down, San Fernando Valley. ALAN FEUERSTEIN, EX 5-8084. A

ELECTRIC REFRIGERATOR, 8 cu. ft., excellent condition. JOHN G. REID, FR 4-6821. A

HOUSE TRAILER, Liberty, 1947, 27', sleeps four, dual wheels, $950. VENA WEINERT. Write to Northrop News. Box 807. A

BICYCLE, girl's 28", new tires, $15. OS 6-8945. A

CHEVROLET, full price $300, 1949 Tudor, engine completely overhauled, safety tubes. IRVING SCHEBE, NO 2-5388. 5 to 7 p.m. week days. A

HOUSE TRAILER, 14 ft. Traveler used 3 times, new awning, furnished, sleeps 3, factory built, walk-in type, $750—terms; FURNITURE, divan, chair and ottoman, $50; Packard-Bell combination radio-phono record maker and player, walnut console model, $50; coffee table, $5; occasional table o.k. for TV table, $4; small gas heater, $5; TRICYCLE, balloon tires, $6; METRONOME, $9. PL 5-6610. A

OLDSMOBILE, '50 88 Club Coupe conv., trans. and duals, $600. FRANK ANDERSON, NE 1-9783. A

DINETTE SET, modern black tubular steel, brass ornamentation. Formica stain and burn proof top, simulated birch color, 4 charcoal chairs, cost $125, $85. CHAS. DE ROME, PL 2-4347. A

ELECTRIC MOTORS, 1/3 h.p. still in factory cartons, $12 ea. A. H. KELLER, DA 9-3594. A

HOUSE, 4 bedroom, vicinity of 182nd and Doty, like new, large lot, fenced, single garage, 1½ bath. Reasonable; Large size 4-drawer CHEST and DRESSER, with mirror, solid maple underneath present finish. Reasonable price. Call between 11 a.m. and 3 p.m. FR 2-7850 or after 5 p.m. FR 5-9885. A

HOUSE, 3-bedroom, near schools and shopping area, rock wool insulation, thermostat heat, hardwood floors, double garage, fenced yard, close to transportation, water softener, garbage disposal, $11,500. S. H. GLOVICKO, DA 4-3413. A

FOR SALE

PONTIAC, 1948 2-door Sedan, $425. ALLEN RICHARDSON, NE 1-6364. A

TAPE RECORDER Webcor model 210, like new, $100 or make offer. HARRY HINES. SY 9-3067. A

GAS RANGE, Western Holly (large), clean, good condition, $50. MARGARET BORTNER. PL 5-3117. A

SPEED BOAT, Chriscraft, hull and fittings only, 26½ ft. long, 6 ft. beam, $300. DA 9-7301 after 5 p.m. A

WASHING MACHINE, Bendix fully automatic with heat control, cost $306. 2 yrs. old, $100; Sterling WARDROBE TRUNK, cost $125, $35; set ANDIRONS, logs, etc., $15. FRED W. MAREK, AX 2-3728.

MG-TC, 1949, rebuilt engine, 4 new tires, 2 spares, $1150. A. C. DUNN, DI 2-7665. A

DALMATIAN PUPS, AKC, 12 weeks old. SAM G. WALL, OS 6-6415. A

BATHROOM SET, complete; 30" throat JIG SAW, nearly new; nearly new WOOD LATHE; 30 gal. Rheem WATER HEATER; Youngstown KITCHEN CABINET; 8" TABLE SAW, used very little. H. E. ROSS, OX 7-3763. A

BAR, 6 ft. custom, red leather uphol., 3 bar stools, $60. BOB GENTZ. Write to Northrop News, Box 818. A

AUSTIN, 1949 4-door Sedan, $150. R. W. FEENY, EA 2-0646. A

STUDEBAKER, 1940 Champion with '47 motor, $50. W. P. CLOTT, DA 9-6923. A

TRICYCLE, 14" wheel, large solid rubber tires, like new, $7. H. HUDSON, OR 1-2930. A

PLYMOUTH, take over equity (free). Payments on 1953 4-dr., Hy-Drive. W. B. TRACEY. Write to Northrop News, Box 817. A

FORD, 1954 Crestline, 4-door, Fordomatic, $1450. WAYNE J. WILES, LO 9-4819. A

AUTOMATIC WASHER, Maytag, like new, $165. O. PELLICAN, OS 6-3432. A

TRAILER, 4' by 7' bed, good tires and 3' racks, highest offer. OR 1-9019 after 5 or weekends. A

HOUSE, 3 bedroom stucco, less than three years old, near school and markets, full redwood fence, large lot. Full price, $8950, will sell for $50 down and $25 per week. TE 4-7305. A

ELECTRIC RANGE, Woolwine, 7 years old, Calrod units, automatic timer clock, good condition, $50. STEPHEN L. BRADLEY, NO 1-9805 evenings. A

TOY POMERANIAN, black male, AKC registered. $60. DA 9-5760 or OS 6-1607. A

RECORD PLAYER, RCA 45 r.p.m., plays thru radio, $5; TV 10" Philco consolette, good condition, $18. DICK RINEHART. OR 4-2408. A

WASHER, Maytag, good condition, $25. FRANCES WILEY, OR 7-3693. A

ENGINE, 1941 Ford V8, excellent condition, less than 3000 miles since complete overhaul, $50. P. SCHLUE, FR 4-5915. A

DESERT AIR LAMP, like new, $25; '37 FORD coupe, $35; 2 Pontiac APRONS, make offer; 2 7x16 tires, $7.50 each. PAUL A CLARKE, PL 3-9822. A

(Continued on Page 4)

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 12)

CENTINELLA & WASHINGTON BLVD., Los Angeles 66. (I go through intersections: Centinella & Jefferson; Jefferson & Sepulveda; Sepulveda & Manchester; Manchester & Airport; Airport & Century; Century & Inglewood; Imperial & Hawthorne; and Imperial & Crenshaw.) NORMA L. CLARKE (5516-36713, Ext. 553). EX 8-1424. 12-2

(Zone 3)

HUNTINGTON PARK AREA. (Want ride or will pick up rides in Huntington Park. Can travel any main street from Huntington Park to Northrop). LUCILLE FRILOT (5528-16633, Ext. 2209), LU 8-7659. 12-3

(Zone 5)

COMMONWEALTH & SPADRA, Fullerton. J. J. YOUNG (5520-20488, Ext. 1233)

(Zone 12)

PACIFIC & VENICE BLVD., Venice. (Would like ride or will take passengers or car pool). J. RACETTE (5501-41006, Ext. 2200). EX 9-7675. 12-12

7:30 a.m. — 4:15 p.m.

(Zone 9)

HAWTHORNE BLVD & 195TH, Torrance. (Southwest Park. Will pick up on Hawthorne Blvd. and/or Prairie Ave. to Plant I or II. Can accommodate four riders). A. AUTERA (5142-31624, Ext. 2031, 20411) FR 9-6606. 13-9

(Zone 14)

COLDWATER CANYON & RIVERSIDE DR., Studio City. (Via Riverside Dr.-Hollywood Freeway-Gower-Wilshire Blvd. & Crenshaw to plant. Valley riders preferred). HANK BREUER (7510-27266, Ext. 2068-2694). 13-14

3:45 p.m. — 12:15 a.m.

(Zone 8)

PACIFIC AVE. & 30TH ST., San Pedro. (From Gate 5A via Crenshaw, Western, Normandie or Vermont to San Pedro; car pool considered.) H. H. HAMILTON (5501-41582, Ext. 2200). TE 3-3333.

4:45 p.m. — 1:15 a.m.

(Zone 1)

HOLLYWOOD BLVD. & NORMANDIE, Los Angeles. PAUL MELLOTT (5587-23631, Ext. 1947). NO 4-0831. 18-1

(Zone 5)

EL SEGUNDO & VERMONT, Gardena. KEITH E. FLANDING (5353-41959, Ext. 1686). DA 4-2233. 18-5

(Zone 7)

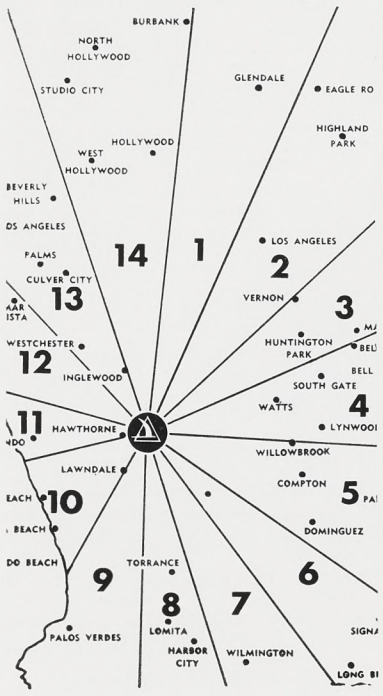
WESTERN & 174TH, Gardena (Will take either Prairie or Hawthorne Blvd.) PAT FROTTON (5507-19367, Ext. 526-524).

Miscellaneous (Split Shifts)

(Zone 1)

MANCHESTER & CRENSHAW or Manchester & Prairie, Los Angeles 47. (Can travel down Prairie, Inglewood or Hawthorne Blvds. Mariposa. Hours: 7:15 a.m. to 4:00 p.m.) E. K. ELLIS (6200-28600 Ext. 241). 20-1

Zone Map



Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 1)

NORMANDIE & PICO, Los Angeles 6. CLARA N. REED (5534-42159, Ext. 2244). RE 2-3154. 2-1

LEXINGTON & PACIFIC or Central & Lexington Dr., Glendale (two blocks from Sears & Roebuck.) KENNETH C. GRIFFITH (5524-20994, Ext. 2209) 2-1

(Zone 2)

VERMONT & W. 76TH, Los Angeles. RANDALL LEE (5360-42383, Ext. 789)

(Zone 3)

HUNTINGTON PARK AREA. (Want ride or will pick up rides in Huntington Park. Can travel any main street from Huntington Park to Northrop). LUCILLE FRILOT (5528-16633, Ext. 2209), LU 8-7659. 2-3

IMPERIAL HWY. at BREA, Pomona. KENNETH BERRY (5583-41850, Ext. 1292). 2-7003 (in Pomona) or OR 7-8339. 2-3

CENTRALIA & SAN PASQUAL CIRCLE, Buena Park. (Can meet at any convenient place). NOREEN APPLEGATE (4520-14057 Ext. 588). 2-3

VERMONT & CENTURY, Los Angeles 41. RAY C. ACREE (5503-37445, Ext. 2681).

(Zone 5)

CARSON & ORANGE, Long Beach 7. G. J. GRUMMER (5161-14909, Ext. 2071). GA 2-4370. 2-5

SOUTH & CHERRY, Long Beach. GEORGE CLEMENTS (5251-19826, Ext. 2576), GA 3-3474. 2-5

(Zone 6)

LONG BEACH BLVD. & 52ND ST., Long Beach. DAVE JESSINGS (5338-41803, Ext. 1328). GA 2-6143. 2-6

(Zone 7)

AVALON BLVD. & SEPULVEDA BLVD., Wilmington. ANGIE MAGILL (5353-37491, Ext. 1628). 2-7

(Zone 8)

CARSON & CABRILLO, Torrance. (Car pool considered). JACK T. RUUD (5355-42360, Ext. 481). FA 8-4671. 2-8

(Zone 9)

PACIFIC COAST HWY. & DIAMOND ST., Redondo Beach. RONALD E. JACKSON (5508-41546. Ext. 2755). 2-9

(Zone 11)

OAK AVE. & MAIN ST., El Segundo. BOB GRUBB (5509-42163. Ext. 2075), EA. 2-4680. 2-11

(Zone 12)

PACIFIC & VENICE BLVD., Venice. (Would like ride or will take passengers or car pool). J. RACETTE (5501-41006, Ext. 2200). EX 9-7675. 2-12

(Zone 14)

MANCHESTER & PRAIRIE AVE., Inglewood. BOWMAN CHUN (5520-3, Ext. 2646) 2-14

7:30 a.m. — 4:15 p.m.

(Zone 1)

CRENSHAW & FLORENCE, Los Angeles. AUDREY COLLINS (8400-18210, Ext. 1492). PL 2-0639. 3-1

VENICE BLVD. & WALGROVE AVE., Los Angeles 66. ALICE C. PARKER (9330-42387, Ext. 2228), EX 8-3371. 3-1

(Zone 3)

HUSTON ST. and SANTA ANA FREEWAY. (Will meet anyone in vicinity of Braeburn Forrest Homes. Will consider car pool). BARBARA TILFORD (3410-13112, Ext. 1679-1289). OR 1-2446. 3-3

(Zone 5)

DEL AMO & ORANGE, Long Beach. (Prefer somebody from Plant II). DONNA WILLIAMS (9330-38007, Ext. 1473). GA 2-7009. 3-5

(Zone 8)

FALDA AVE. & 189TH ST., Torrance. (Could meet ride at 189th or 190th and Crenshaw Blvd.) SHIRLEY STEVENSON (3141-12424, Ext. 2606), DA 9-2798.

CARSON & CABRILLO, Torrance. (Need ride home only.) EVELYN STEPHENS (3141-12398, Ext. 484), FA 8-3127. 3-8

CERISE & 190TH, Torrance. (Could meet ride at 190th & Crenshaw.) WANDA LEE KIEFER (3420-13130. Ext. 1815), DA 9-5958. 3-8

WESTERN & 247TH ST., Lomita. ALICE K. INGRAM (4220-13585. Ext. 2260), DA 6-3373. 3-8

(Zone 9)

PRAIRIE or HAWTHORNE & 163RD, Lawndale. RUTH WADE (4220-13992. Ext. 674). 3-9

(Zone 10)

VIRGINIA & GRAND, El Segundo. CAROL SIMONER (9320-38960, Ext. 2151). 3-10

BBSF CLASSIFIEDS

(Continued from Page 3)

FOR SALE

DODGE, '39 with '47 engine. $75. OR 7-9820 after 4 p.m. A

CHEVROLET, 1952 4-door sedan; LUGGAGE TRAILER. all steel, racks, tarp, hitch included, $75. A. A. BEYER, OR 7-3922. A

WASH BASIN, 18x20 cast iron enameled; WATER HEATER; GARBAGE DISPOSAL, like new. E. TROWBRIDGE. OS 6-6577. A

WANTED TO BUY

WIRE MESH, for fencing 6' height, need 150 ft.; would trade victrola or slide projector. TOM ESTERBROOK, OS 5-8644. A

BINOCULARS. 7x50 only,—must be in good condition. EX 8-4007 before 3 p.m.

BICYCLE, Boy's 20 inch. S. K. CLARK, OS 5-7030. B

SHOTGUN, small 20 gauge or "410". MERTON E. WINTERS. Write to Northrop News, Box 805. B

WHEELBARROW, 4 or 5 cubic foot capacity. contractor type; CEMENT MIXER, prefer elec. motor type. motor not necessary. D. SNODGRASS, FR 2-4652. B

TRUMPET, with case, for beginner, must be good condition. DAVE OGILVIE, OR 1-0162. B

SHOTGUN, 410, Winchester model 42, full choke. C. J. GILBERT. Write to Northrop News. Box 814. B

DINING TABLE. old-fashioned round wooden, chairs not desired. reasonable. Write to Northrop News. Box 813. B

RACER BIKE. boy's 24", in good condition. FRANCES WILEY, OR 7-3693. B

ELECTRIC DRILL, ¼ inch, also BENCH VISE. Call anytime after 4:30 or Sat. and Sun. M. KRAVETS, TO 9-8937. B

FOR SALE OR TRADE

PLYMOUTH. '41 station wagon, new top, will deliver to L.A. area, $75. DICK M. LUCAS. 969, Space 15. Lancaster. M

MERCURY CONVERTIBLE. 1948, nosed, decked, full boot, $225 or will consider motorcycle. FR 9-8303 after 5. M

DOBERMAN PUPS, A.K.C. registered, champion lines, $25 cash or trade for anything of equal value. 8 weeks old. CHARLES A. ROTH. ME 3-1350. M

CADILLAC. 1949 62 4-dr., Hydra-Matic. Want older car for equity. must finance bal. of approx. $600 or cash. J. J. LA BIANCO. Write to Northrop News, Box 802. M

G M W

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 10)

SEPULVEDA BLVD. & ROSECRANS, Manhattan Beach. (I live very close to the Pen and Quill restaurant on Sepulveda Blvd. and could meet any one at this point.) ARCHIE L. AMES (9340-42241, Ext. 2264). FR 4-3717. 3-10

(Zone 12)

LA TIJERA & 74TH or Airport Blvd. & La Tijera. Los Angeles 45. DOROTHY W. POE (5500-14191, Ext. 2366 or 2367). OR 2-4774. 3-12

8:00 a.m. — 4:45 p.m.

(Zone 11)

INGLEWOOD AVE. & 117TH, Hawthorne. (As soon as possible). DIANNE G. BUELL (8310-27405, Ext. 2402). 5-11

(Zone 12)

LATIJERA & 74TH or Airport Blvd. & LaTijera. Los Angeles 45. DOROTHY W. POE (5500-14191, Ext. 2366 or 2367). OR 2-4774. 5-12

3:45 p.m. — 12:15 a.m.

(Zone 13)

VENICE & PROSPECT, Culver City. HUGH DAVIS (7210-42125, Ext. 508), VE 7-1638. 6-13

4:45 p.m. — 1:15 a.m.

(Zone 6)

LIME & 1ST, Long Beach. (Anywhere in Long Beach area if not close to above address.) ELLEN PEDERSEN (5507-42271, Ext. 526-564), HE 64-433. 8-6

(Zone 8)

CRENSHAW & 190TH, Torrance. (I live one mile east of Crenshaw. LULA HARDING (5517-34489, Ext. 572). DA 9-5342.

(Zone 10)

CORDARY & 135TH, Hawthorne. BARBARA DRAVLAND (5507-42069. Ext. 526 and 564). OS 6-2783. 8-12

INGLEWOOD AVE. ON W. 130TH ST., Hawthorne. (JOHN P. DETORE (5930-42093, Ext. 753), OS 5-7380. 8-10

Miscellaneous (Split Shifts)

(Zone 10)

PIER AVE. & LOMA DRIVE, Hermosa Beach. (Hours: 7:15 a.m. to 4:00 p.m.—Mariposa.) JACKIE SHAY (6150-39469, Ext. 3-625, 626, 627, 628). 10-10

FOR SALE OR TRADE

PARROT, small, green and gold, priced to sell or will trade. SHIRLEY FELIX, TO 3-8961. M

PUPPY. Will exchange one Dachshund puppy for stud service; male dog must be registered and black or dark in color. M. LISTON. GA 3-4452. M

MOVIE CAMERA, Bolex H-16, Lytar 25mm F:1.9 and Taylor-Hobson Cooke 100mm (4") F:3.3 lenses, trigger handle, deluxe case, six months old. Cost $500, sell for $250 a take good 35mm camera in trade. OR 7-7651, days. M

TABLE SAW. Dunlop (Sears) 8", and factory saw table, 1/3 h.p. motor, switch, cable; 12" JIGSAW on steel cabinet, ¼ h.p. motor. Sell both for $50 or trade for a good shotgun, rifle or welding equip. S. H. DUNWOODY, GA 1-7414. M

TV, 17" Silvertone, $70, or 14" Philco, $50; 1940 OLDS club cpe., $30 or trade for pickup truck, panel, slide projector 35mm. or what have you? S. K. CLARK, OS 5-7030. M

PARAKEET with terrific temper, rare purple-blue color, black wings, 2-month-old, female, tries to talk. ESTHER COTTRELL. Write to Northrop News, Box 804. M

OLDSMOBILE 1953, good condition, for sale or trade for earlier model car. Reasonable. must sacrafice. OR 7-5523.

PLYMOUTH '39 coupe, '46 motor. MERTON E. WINTERS. Write to Northrop News. Box 806. M

FORD CONVERTIBLE, 1946, $175 or trade for TV set, not over 17", must be good condition and brand, car needs top and battery. has 2 new tires. JAMES LAYMAN, OS 6-7482. before 4:00 p.m. week days. M

JAGUAR, 1954 XK120, wire wheels, never raced, must sell, will consider older economical car as part trade. NORMA L. CLARKE, EX 8-1424. M

BIKE, girl's Schwinn, like new, brake on pedals, regular size, sell or trade for electric phonograph equivalent in value. EA 2-0105, after 5 p.m. M

CHRYSLER, 1947 New Yorker club coupe, Fluid Drive, $175 or make offer, will also trade for truck. JIM MUSE, PL 5-0194, after 5 p.m. M

TAPE-DISC AND PA RECORDER, Wilcox-Gay, Prestomatic, model 4C10. able to record on disc, tape or from disc to tape, may use as conventional portable phonograph (78 rpm.), or public address amplifier with instrumental over-ride, trade for HI-FI or sell. S. M. SIMPSON, OR 2-8076, after 6:00 p.m. M

WILLYS, 1939 Sedan, $35 or will trade. FR 5-9780. M

LINCOLN, 1947, with 1948 Mercury engine, overdrive, power window-lifts. Will have car painted for right deal. Can finance, or will consider taking small items of value in trade. W. S. COOK, DA 6-2467 evenings or weekends. M

NASH, 1949 "600" 4-dr., $225; original CAR RADIO for Chev. '49-'50 trade for rifle. 30.06 cal. (prefer M1). ARTHUR FERNANDEZ, AN 3-7620. M

FREE (To be given away)

KITTENS. two male, 4 months old, housebroken and well-behaved. R. C. NEWMEYER, TE 3-8084. D

PUPPIES, three, mixed cocker and toy shepherd, will be ready for Christmas gifts. M. A. SUTHERLAND. Write to Northrop News, Box 810. D

RENTALS OFFERED

ROOM for woman, kitchen privileges, garage, Manhattan Beach, $45 per month; references requested. FR 4-0901 after 4 p.m. E

APARTMENT, unfurnished, 2-bedroom, Westchester, double, newly decorated, garbage disposal. $85 month, available Jan. 1. OR 1-7458 before 3:45 p.m. E

ROOM for male, prefer night shift, 5 minutes from Northrop, $7.50 a week. BETTY McNABB, PL 4-3698. E

HOUSE, large one-bedroom, newly decorated, stove and new wall heater. no children, no pets. $55 month. Call after 3:30 p.m. PEARL HARDACRE. OS 5-3423.

SHARE APARTMENT. young gent will share two-bedroom apt. with same, laundry room, 21" TV, open beam ceilings, twin Hollywood beds. etc., $35 month. DALE E. MONTEENY OR 4-2863. E

HOUSE, 2-bedroom, unfurnished, on hill 7 blocks from beach, $85 month. A. C. McGRAW, FR 5-1694. E

APARTMENTS, new, deluxe, 1 and 2 bedroom. unfurnished. garage, near Century and Crenshaw Blvds., $77.50 and $95. EX 6-6823. EX 9-5587. E

BACHELOR APARTMENT, new, private entrance, tile shower, $12 per week, Inglewood. OR 7-0985, after 6:30 p.m.

DUPLEX, new one bedroom. garbage disposals, car ports, unfurnished, $65 month. DAVE ADAMS, OS 6-1846. E

APARTMENT, furnished 3-room, garage, patio, ocean view, $70 per month. DA 6-7990 or FR 2-8710. evenings. E

RENTALS OFFERED

HOME TO SHARE, working couple, lady, to share 3-bedroom furnished home in Morningside Park. PL 4-8289. after 2 p.m. E

APARTMENT, new duplex, 1 bedroom, unfurnished. Prairie Ave. opposite Alondra Park. $65 month. V. F. RILEY. FR 5-2780. E

ROOM AND BOARD for gentleman, private home. Vermont-Manchester area. PL 2-7900. E

HOUSE, small, furnished, in rear, $50 mo., utils. pd., private, near Northrop. One man preferred or working couple. OS 6-1607 or DA 9-5760. E

DUPLEX. new 1-bedroom, large living room, TV outlets, garbage disposal, children welcome. Redondo Beach, garage available, $65. child care available. GEORGE L. SICKINGER, FR 4-5680. E

ROOM, furnished, single outside entrance, private bath. $9 per week. N. A. WILLIAMSON, FA 8-6839. E

FURNISHED, small house in rear, 2 rooms and bath. Lawndale. $35 per mo. O. H. LARSEN. DA 9-3119. E

ROOM, for single woman or couple. OS 6-8945. E

RENTALS WANTED

HOUSE OR APARTMENT, 1 bedroom, furnished, Torrance area, will pay around $65, no children. AL GARZA. DA 6-2567, after 5 p.m. F

ROOM. Girl desires room with private bath and kitchen privileges, private entrance preferred or small bachelor apartment with utilities. Write to Northrop News, Box 816. F

CHILD CARE OFFERED

CHILD CARE, ages 3 to 10 years, play yard, fenced, lots of play equipment, Christmas and birthday parties, hot lunches, naps, snacks, 1 mile from Northrop, near school. day or night shifts. OS 5-7993. G

PERSONALS

RIDE OFFERED. Am leaving for New Orleans, Louisiana, and points south, 12-22-55 4:15 p.m. Will take 3 to 4 riders, new Chevrolet. Upon return, leaving New Orleans 12-31-55. E. N. BALDWIN, Jr., OS 6-6875. L

WITH THANKS. We want to thank everyone for the flowers, cards and all the wonderful things they did for us in the time of our sorrow. ESTELLA and HAROLD KRAUS. L

SHARE HOME. A Norcrafter mother wants to share her home with another Norcrafter mother on night shift. Eliminate baby sitter wages and share household expenses. PL 4-4038 after 5 p.m. L after 5 p.m. L

RIDE WANTED to Boise, Idaho for the Christmas vacation. Will help drive and share expenses. KENNY BERRY, OR 7-8339. L

RIDE OFFERED. Would like someone to drive to Seattle, Wash. in my car sometime after the first of the year. Going one way. Share expense. DORIS KAISER, OR 1-9375. L

ONTARIO FORMS TOASTMISTRESS ORGANIZATION

To answer the many requests of lady Norcrafters at the Ontario facility, the NRC there has recently set the wheels in motion to sponsor the chartering of a Toastmistress club.

Lela Owens, Empennage Assembly and Installation; Ruth Harrell, Personnel; and Betty Hanna, wife of NRC Veep George Hanna—with valuable assistance from the Northrop Ontario Toastmasters # 1506 organization—sparked the formative meeting on November 15.

Reports from Ontario indicate that the response was enthusiastic enough to call a December 6 meeting, with Ruth Harrell in charge of the program.

The newly-formed group plans a charter meeting for early January, and states that a few openings still exist for interested Ontario lady Norcrafters.

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
League play now in progress Mondays, 6:30, Fremont High School; Thursdays, 6:30, John Muir Jr. High School.

BIBLE STUDY, Roy Stahl
Meet daily, Plant I, east mezzanine conference room, 11:15 a.m.; Plant II, M.W.F. 12:00 conference room M1-B1, T.Th. 12:30 conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Wayne Chamberlin

BOWLING (nights), Garland Steiner
Christmas Tournament Dec. 27-30. Applications available in Personnel Activities.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Robert Carberry
Meet every other Friday evening, 7:30 p.m. Next—December 9.

CAMERA CLUB (nights), Gene Beck
Meet every other Saturday, 7:30 p.m. Next—December 10.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF, Andy Titus

GOLF (nights), Leo Baker
Christmas Tournament, Western Ave. Golf Course, December 28 and 29. Applications in Personnel Activities, Plants I & III.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—December 19.

MIXED CHORUS, Florence Graveline
Meet every Wednesday evening, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, William Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Bill Kappele
Meet 1st and 3rd Tuesday of each month at Annex, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m. Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—December 10.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins.
Christmas Tournament December 27-28-29-30, 20th Century Bowl.

BASKETBALL, Pam Srader
Practice sessions Alondra Park Gym, Tuesday evenings.

DINNER CLUB, Hazel Stewart
Monthly dinner meetings.

INTERIOR DECORATION
Weekly meetings in lampshade making every Thursday evening, 7:30 p.m.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet Tuesdays, 7:00 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Vi Murphy
Meet first and third Thursdays, 7:30 p.m.

SPORTS *The Northrop News*

Yuletide Carolers--Northrop Style

NRC SONGSTERS—. Members of Mixed Chorus posed for photog prior to busy holiday season. From left, seated: Lillian Pannell, Virginia Wiedrow, Violet Rhoades, Emily Felder, Betty Hardacre, Carol Hardacre, Julia Webster, Virginia Musselman, Betty Ciavarella, Roberta Williford, Dorothy Lopez. Standing: Andy Giba, Charles Montero, William Porter, Beatrice Boggess, John Cummins, Charles L. Nixon, director; George Bingham, Florence Graveline, commissioner; John Nappier, Ed Hansen, Walter Thompson, Andrew Stripsky. (Story below.)

Camera Clubs Offer Many Programs to Lens Hounds

The NRC Camera Clubs—day and night shifts—have again joined the Southern California Council of Camera Clubs and are now in their second month of competition, according to word received from Club Commissioners Bob Carberry and Gene Beck.

In line with increasing competition and as a service to beginning lens hounds, the night shift Camera Club will begin a six month course in popular photography on January 7. The lessons are free and all Norcrafters are invited. The course will be given in conjunction with the regular club meetings which begin at 7:30 in the NRC Clubhouse on the first and third Saturdays of every month. Members are asked to provide their own cameras.

Plans are also being formulated for the NRC Camera Clubs to again become members of the Photographic Society of America.

Commissioners Beck and Carberry also announced the annual NRC Camera Club competition and dinner which will be held on Saturday, December 17, at 6:30 p.m. in the NRC Clubhouse Annex. The event will be a joint meeting of both day and night shift Camera Clubs and all members are invited.

The price of the dinner will be not over $1.50, according to Comish Carberry, and dinner reservations may be made any time before December 14 by contacting the Personnel Activities office, extension 2784, or Camera Club Commissioner Bob Carberry.

The next meeting of the day shift Camera Club will be held on December 9. The program includes a stereo slide show to be given by Norcrafter George Pond. The slides will feature shots of various national parks and several local flower shows. All Norcrafters are invited.

SKI CLUB GROUP TO SET PROGRAM AT COMING MEET

It's snow season again!

Norcrafter members of the NRC Ski Club are looking forward to the next Club meeting at the NRC Clubhouse on Thursday evening, December 15 — 7:30 p.m.—when plans for the forthcoming ski season will be discussed. In addition to the business meeting, members will see a film on the ski sport followed by the TV viewing of Ski Tips at 8:30.

All skiers and those interested in skiing are invited to attend, according to word received from Club Comish Howard Fletcher.

IT'S NOT TOO LATE!

All lady Norcrafters are reminded that there is still time to dress a doll for a needy youngster's Christmas present and enter the NRC annual Doll Dressing Contest.

Entry deadline is December 13. Undressed dolls are still available in the Personnel Activities office, Plant I.

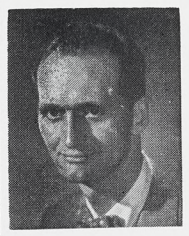
Dolls will be judged for prizes on December 15. All dolls will be on display in the Plant One cafeteria.

Bowling Trophy Winners

KEGLING WINNERS . . . NRC Bowling league trophy takers are pictured, front row, left: Clarence Almich, Ernie Horn, jr., Charles Hynes. Second row, left: La Mar Saunders, Charles Self, Harold Knopp, Bob Petrini. Back row, left: George Long, Homer Kennedy receiving for Dean Gibbs, Herbert Happoldt, Harry Warner, Marvin Ireland, Howard Johnson. Not in the photograph was another winner, Victor Snook.

NRC Ladies in Hoopster Loop Play

By HAL HUNSBERGER
President
Northrop Recreation Club



Among the many NRC announcement bulletins being distributed throughout the plants are the following items of interest to all Norcrafters.

All day shift lady Norcrafters interested in participating in NRC-sponsored basketball this winter are invited to contact the Personnel Activities office, extension 595. The team will play in the Los Angeles County League at Alondra Park gymnasium on Redondo Beach Boulevard (between Crenshaw and Prairie Avenue). Games will be played on Tuesday nights.

The Model Railroad Club invites all Norcrafters and their families to attend the regular meetings of the Club every Thursday evening at 7:30 p.m. The Club has an intricate set-up of tracks and equipment in its permanent quarters at 4411 West Redondo Beach Boulevard. Members need no tools or equipment—only a genuine interest in model railroading.

Norcrafter skaters—both shifts—are invited to take part in the NRC skating activity now current at Skateland, Redondo Beach. The day shift skates on Wednesdays from 7:30 to 10:30 p.m. (there are pot luck suppers once a month) and the night shift skates on Sundays, same time. Admission (with Northrop I.D. card) is 50c . . . skate rental 25c. Families and friends also welcome.

NRC Chorus In Holiday Programs

The NRC Mixed Chorus is presently in the midst of a busy round of holiday season performances.

The group presented its entertaining Christmas program on Saturday, December 3, at the McKinley Home for Boys in Van Nuys.

Future performances include programs on Friday, December 9, at the Los Angeles Orphanage in Hollywood; the Sister Kenny Polio Hospital in El Monte scheduled for Thursday, December 15; the Sawtelle Veterans Hospital, Sunday, December 17; and the Daniel Freeman Hospital, Inglewood, on Tuesday, December 20.

In addition to these benefit performances, the group has been requested to sing for various Norcrafter departmental Christmas parties scheduled for December 23.

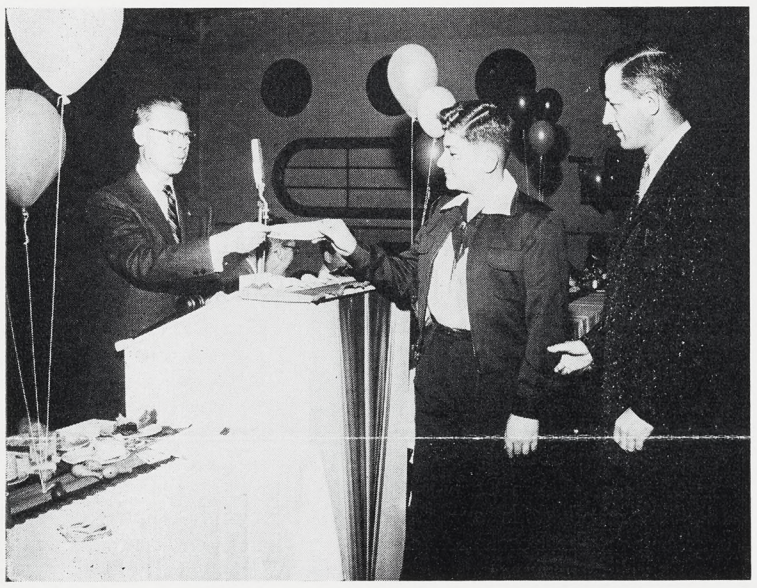
Commissioner Florence Graveline announces that there are still openings in the Chorus for all Norcrafters who would like to participate in the Christmas programs.

Chorus meetings are held at the NRC Clubhouse every Wednesday at 7:30 p.m.

THE Northrop Scene BY DAY AND NIGHT

Management Club Host to Children

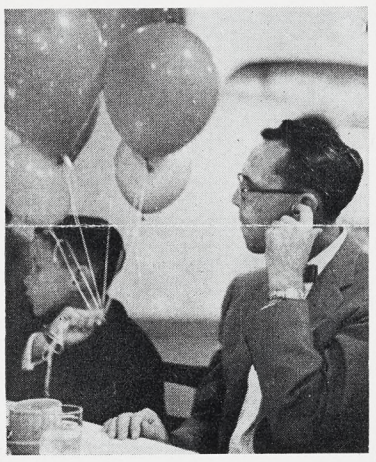
ONE OF FEATURES of Management Club's first children's program was display of flight gear as modeled by Ken Hackney, described by Jack Farley (far left). Junior Norcrafters Don Beery, Doug McKay, Greg Smith, and Roger Gard are interested.



PRESENTATION was made at meeting of U. S. Savings Bond to John G. Strasser, jr., for winning entry in essay contest sponsored by MC in connection with Shell Oil tour some months back. Educational Chairman Ralph Hampton makes the award while John's dad approvingly witnesses the ceremony.

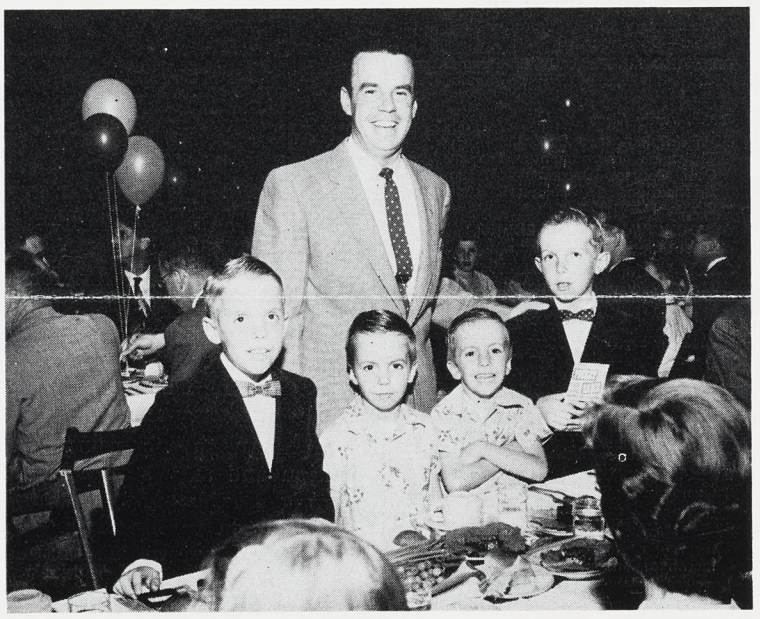
OFFSPRING gathered near stage to watch electrical and chemical display that proved highly interesting to children of all ages in audience. The dinner meeting, held in NRC Clubhouse, proved to be top success, with younger participants on best behavior.

PLEDGE of Allegiance to flag, customary part of all Management Club proceedings, was led at "kids night" by Bill Bradford and Janet Akin, whose fathers are both past presidents of the club.

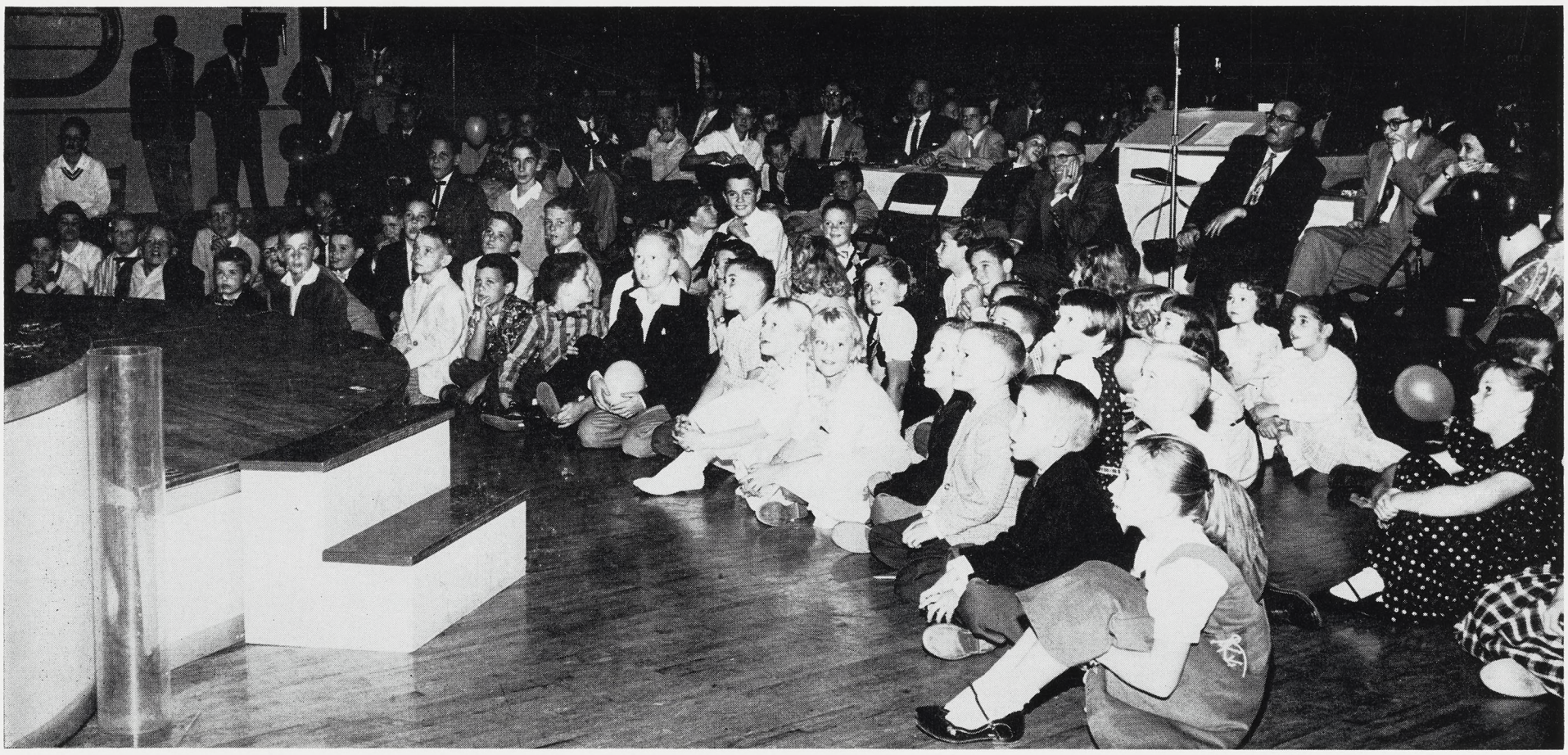


THOUGHTFUL Keith Thurston was subject of one of candid camera pics taken during evening's activities. Fathers were undisturbed by popping balloons, numerous toys diverting adult attention.

PRINCIPAL speaker at children's dinner meeting was Jack Farley, chief Production Test pilot, Palmdale. He is shown being introduced to audience by Management Club President Scotty Smith. Ralph Hopkins, program chairman, is gentleman at lower left of pic.



FREE DINNERS for member bringing most children went to Warren Sparks, Manufacturing Control, who was flanked at dinner table by his four sons. They are Jimmy, twins Don and Dave, and Billy. Pictorial record of evening by Roy Wolford, John Branzetti.



A Merry Christmas

Automation Strides

News High Honors

(See Page Two)

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, December 21, 1955

BUILDING PLANS DISCLOSED

NEW NORTHROP ENGINEERING RESEARCH CENTER HUB OF LONG-TERM MASTER PLAN

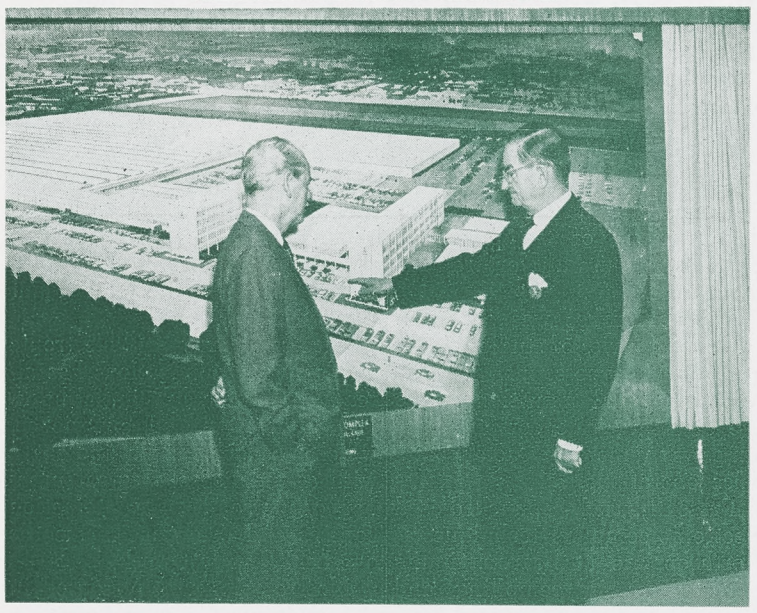
Northrop has applied for building permits and will begin work in Hawthorne on a facilities consolidation program to include construction of one of the world's most advanced scientific engineering research centers, President Whitley C. Collins has announced.

In making the disclosure of the company's plans, Collins said the core of Northrop's development program will be a new 250,000-square-foot engineering center to be built at an estimated total cost of $5,335,000 and "dedicated to the advancement of aeronautical progress".

Other Northrop facilities to be constructed simultaneously with the science center include an engineering test laboratory, a low-speed wind tunnel and a new cafeteria. All of these installations and the research center will be funded by Northrop without equity financing. Estimated cost is approximately $8,000,000 and target date for completion is late 1956.

In addition to designing the engineering center and other buildings, the planning, architectural and engineering firm of Pereira & Luckman also is completing for Northrop a long-term master plan which calls for continuing consolidation and im-

(Continued on Page 3)



HONORABLE Cecil R. King, representative of 17th District in U.S. Congress, previews details of Northrop long-term master plan with President Whitley C. Collins . . .

To All Norcrafters

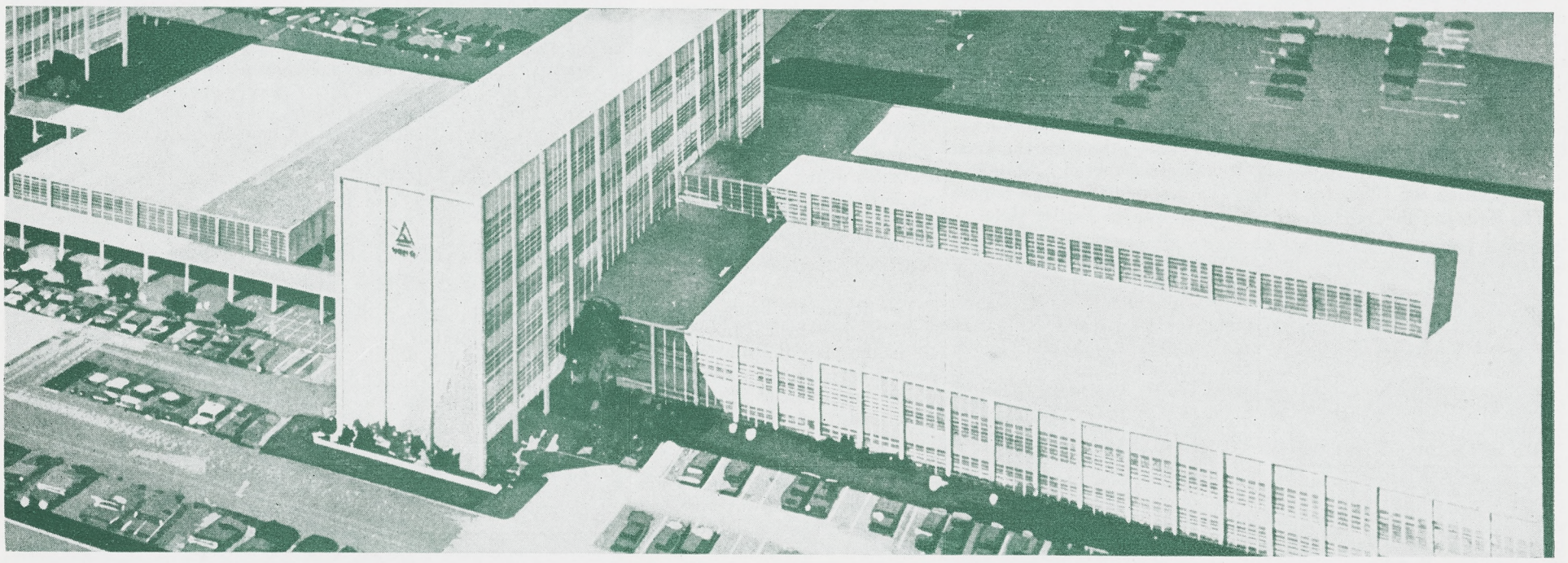
Mrs. Collins joins me in wishing you and your families a very Merry Christmas and a healthful and Happy New Year.

For your willing cooperation and assistance during the past year, I am humbly grateful. Your continued devotion to the tasks at hand and your proven loyalty have made me proud to be one of you.

God bless you all during the holiday season and throughout 1956.

Whitley C. Collins

NEW ENGINEERING and science center at Northrop will look like this artist's conception when completed. Building permits have been filed and work is scheduled to start shortly on the multi-million dollar structure, part of master plan.



and A Happy New Year!!

NORTHROP NEWS EDITORIAL

Christmastime: Season For the Warm of Heart

Every year, at the approach of Christmas, there is an almost universal surge of the spirit that catches up in its enthusiasm the tired and the indifferent and the busy . . . even the cynical.

The pleasure that believers find in Christmas and all that it means is too contagious and too enthusiastic to brook resistance. And thus, sometimes without particularly wanting to, even the hardest-shelled are swept into the seasonal bustle, eyes shining like the rest.

There must be motivation somewhat apart from mere desire to conform to the custom. It is only on special occasions, out of the ordinary occasions, that the human spirit glows with this special out-of-the-ordinary warmth—times of distress, times of extreme joy, . . . and Christmas.

Perhaps one answer is that people feel a need to give . . . and giving is the very expression of Christmas.

To give without embarrassment is a difficult thing. It is equally difficult from a standpoint of time—we are often so caught up in the rush of daily affairs that we overlook those who could well use our helping hand.

But at Christmas it is different. It is the season to give. The pent-up desire to do good toward your fellow man floods over. For this brief, but joyful and happy time we act toward each other in the way that was taught by Him whose birthday the holiday commemorates.

Our everyday world too often is highly impersonal. We all miss the healthy, warm feeling of simple and sincere fellowship. By the very fact of giving at Christmastime we try to regain touch, if only briefly, with that feeling.

The world is so vast, and man is so little, that he often despairs of leaving his mark in any more than just a little area. But by giving he finds that his influence has ever-widening ripples, so that eventually his performance reaches places he never dreamed of reaching alone.

Many of these ripples, we might observe with forgivable satisfaction, reach out from the good efforts of warm-hearted Norcrafters who—throughout the shops and offices of our plants—have piled up huge stores of gifts to give to those of their brothers who happen to be in need this Christmas. The brightness of deeds like these add shine to the Christmas star forever. It makes one feel proud to be among people like these, who take time to show compassion and consideration in the midst of their own hurried activities. This is the warmly true spirit of Christmas.

News Is Doubly Honored By Editors' Association

The Northrop News department won peak honors last week at the annual Christmas meeting of the Southern California Industrial Editors' Association.

Charles Bradford, editor, was named Editor of the Year, and Harry Herranen, assistant editor, nights, was elected president of the association for 1956.

The Editor of the Year award, highest honor in California industrial communications that can be bestowed, was granted in recognition of "superior editorial ability; material and technical contributions to the profession of industrial editing; and outstanding service to the Southern California Industrial Editors' Association and the International Council of Industrial Editors".

The ceremony for both honors took place at the Statler Hotel.

The office of president, assumed by Herranen, has been served during the past years by industrial communications representatives from such companies as Coca Cola, Los Angeles Times, Southern California Gas Company, North American Aviation, Southern Counties Gas Company, and Northrop. Three Northrop editors have been president.

Since 1947 Northrop News has won over 30 awards for all phases of journalistic excellence—layout of material, typography, feature stories, safety stories, stories explaining company operations, use of art work, photography and photo layout, public service stories. Ten separate awards were won in 1951 alone. One of the most highly prized honors was the Public Service Award last year from the State of California.

Such achievements weigh heavily in association officials' deliberations when awards are due.

Down --- ---Range

Be a Technical Illustrator—is word for Norcrafters so inclined . . . Night class in the subject is now being sponsored by L. A. Trade Tech (Frank Wiggins) . . . Formation of class will depend on demand.

Ken Tuttle, Northrop Computer Services, will address National Simulation Conference at Dallas, Texas, January 19 . . . Topic will be "Design of a Non-Linear System with Random Disturbances" . . . Conference is at Baker Hotel . . . Dallas and Fort Worth electrical, electronics and radio groups are co-sponsoring.

TEAMWORK STUDIES INTO AUTOMATION CONTINUING

TEAMWORK ASPECT of company's continuing studies into automation is personified by this group which attended Univac training conference last week. Rear wall: George Forbes, C. W. Sampson, Art Pearson, Frank Ziegler, and Bob Ludwig (latter from Remington Rand). Far side of table: Gene Shafer, John Kissel, Tom Doudna, Jack Lind. At door: Bob Phillips, who helped arrange meeting. Right wall: W. K. Schreyer (Remington), Don Lutz. Middle: C. K. Enoch, O. P. Johnson, Stan Huston, J. N. Barker. Right: Bill Buster, C. J. McLucas. They represent Manufacturing, Finance, Materiel, Administration, and Industrial Relations divisions. Personnel are building backlog of experience on automation.

A four-day training program last week—sponsored by the Manufacturing and Finance divisions and involving representatives of other company divisions—focused attention on Northrop's long-established program of keeping its personnel abreast of latest developments in the field of automation.

The program, including an introduction to the famed Univac and the programming principles necessary to its operation, was the first conference of its kind arranged by the manufacturer for the aircraft industry, although many of the principles have been in use at Northrop for some time.

The conference was one of a continuing series of studies aimed at preparing personnel for the coming natural transition to the use of larger-scale computers in almost innumerable factory and office operations.

Presently-used punched-card electronic computer techniques at Northrop are at near-maximum effectiveness in compiling and processing data.

Included are such manufacturing applications (the training program was aimed primarily at this type of use) as Work in Process and Tooling Control in Manufacturing Control; Quality Control statistical reports; Operations Analysis Hours Control reports; Spares Ordering and Release, jointly operated by Production Engineering and Manufacturing Control; and a number of Property Control records and reports by Property Control personnel of Industrial and Plant Engineering.

Successful use of electronic aids in these applications has already built up a substantial backlog of basic skilled experience, which has since been increased with attendance of a great number of personnel at automation courses and conferences like the one held here last week.

Most of the principles used in the applications are the same as those utilized in programming functions for the more advanced, larger-scale computers.

Arrangements for the training program and the inter-divisional attendance there were made by Bob Phillips, Indirect Methods Analysis, with the cooperation of George Johnson, Finance.

Insurance Forms To Norcrafters

New insurance certificates—replacing all former certificates—are being distributed to Norcrafters currently, the Group Insurance section of Personnel has announced. Old forms should be destroyed upon receipt of the new.

Two forms are being issued—a white one, which is the life, accident, hospital and surgical, and polio policy; and a yellow form, which outlines the Norcrafter's major med coverage.

Although coverage under the policies was effective last February 28, when the latest of a series of improvements was effected, the policies bear a date of November 11, 1955, in order to incorporate the latest possible pay status—and thus the largest possible coverage—of personnel.

Group Insurance Supervisor Bill Waldon requests that any Norcrafter finding information on his policies not in agreement with his own personal records return the policies by mail to the Group Insurance section, Dept. 4220, Zone 22. To the policies they can attach a note describing the discrepancy noted.

PUBLICATION SERVICE NORCRAFTER ELECTED AS TPS BOARD MEMBER

Jim Randall, Publication Service (8320) Norcrafter, has recently been elected to the board of directors of Technical Publishing Society. Among other duties Jim will edit a monthly news bulletin which began publication in November.

A non-profit professional group, TPS encourages the exchange of information in the technical writing field, and is promoting the general improvement of communications methods in the field of technical endeavor.

A number of Northrop tech writers are associated with TPS, according to Randall, who himself has been active in the society since its earliest days.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 9

Published every other Wednesday by
INDUSTRIAL RELATIONS DIVISION, NORTHROP AIRCRAFT, INC.
JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
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NEW BUILDING PLANS...

(Continued from Page 1)
provement of the company's facilities during the next several years. Purpose of the program, Collins said, is to make the company's physical installation the most efficient in the airframe industry.

"This $8,000,000 project is only the first step in a continuing long-term program to make Northrop the nation's best facility for the design, development and production of aircraft and weapons," Collins asserted. "We will accomplish this program step by step, and during the coming years our board of directors will review each phase in the light of business conditions which prevail at the time."

As part of the first phase, Northrop will also supervise construction for the U. S. Air Force of a new guided missile engine test facility and an environmental and electrical test laboratory, in addition to the new company developments. Both of these facilities, also to be located at Hawthorne, will be used by Northrop under Air Force contracts.

Completion of the science and research center will result in consolidation of nearly all Northrop engineering activities under one roof and will offer top working conditions to the company's outstanding team of talented engineers and scientists.

"Some of the projects we expect to undertake in this new facility include further exploration of the 'thermal barrier' and of the new types of guided missiles," Collins disclosed.

"Within these walls, our engineering and scientific personnel may well find the answers to some of the challenging problems remaining to be solved before men can dispatch piloted or unpiloted vehicles into outer space."

Housed in the air-conditioned science center, which will consist of two floors with a six-story tower, will be members of Northrop's aeronautical engineering team and also scientific personnel devoted to the advancement of company programs in electronics, optics, guidance systems for unmanned aircraft and other precision equipment.

The six-story tower will house administrative, security and electronic testing areas and building machinery. Research laboratories and engineering service departments will be grouped on the first floor. Project and analytical engineering functions will be housed in the second story.

The new engineering structure will be an integrated, functional building of steel, concrete, aluminum and glass, built specifically for maximum usefulness in the exacting work of modern aircraft design and manufacture. The building will be equipped with specially-designed electronic testing areas and will include both flexibility and allowance for economical future expansion.

Centralization of Northrop's modern research and development and environmental test equipment will be effected in the two new laboratories to be constructed. Existing equipment will be supplemented by the latest types of test machinery to assure a maximum effectivity under Northrop's comprehensive product reliability program.

Northrop's new wind tunnel will operate at higher speeds with a lower turbulence level than the existing tunnel and will incorporate a new and improved balance system.

Guided missile airframes and engines will be tested in Northrop's new all-enclosed sound muffler. This low frequency noise modular test cell will be built of concrete and will utilize the most advanced design and construction techniques.

The proposed cafeteria will be similar in design to the engineering building and immediately adjacent to it. It will encompass a total area of 34,000 square feet.

Surveys were made at Northrop's Hawthorne installations concerning relation of the existing buildings to production flow; traffic and flow of materials, prefabricated parts and assembly units throughout the plant; vehicular and pedestrian traffic; all utilities such as electricity, sewers, water and gas; unconventional fuel and power supply networks; and functional evaluation of the use of existing structures.

Diagrammatic studies of the new engineering building considered the inter-relationships of departments and facilities in the evolution of the final design of the new science progress center. Pereira and Luckman created a basic module design for Northrop's research center, using modular partitions, wiring and floor slabs as standard equipment.

"We are entering into this new era of development because we believe Northrop is destined to assume an increasingly important role as a manufacturer of advanced aeronautical weapons," Collins said.

"In construction of this advanced new center," Collins concluded, "we have concerned ourselves primarily with providing facilities equipped to meet the challenges of the next few decades. Insofar as you can consider a building a tool or a piece of equipment that can help men think and create better, we are striving to make the best possible use of brick, steel, stone, cement and other building materials."

All buildings will be erected on Northrop's Hawthorne site. The new structure will replace temporary buildings erected during and after World War II. The consolidation is expected to result in a net reduction in covered area.

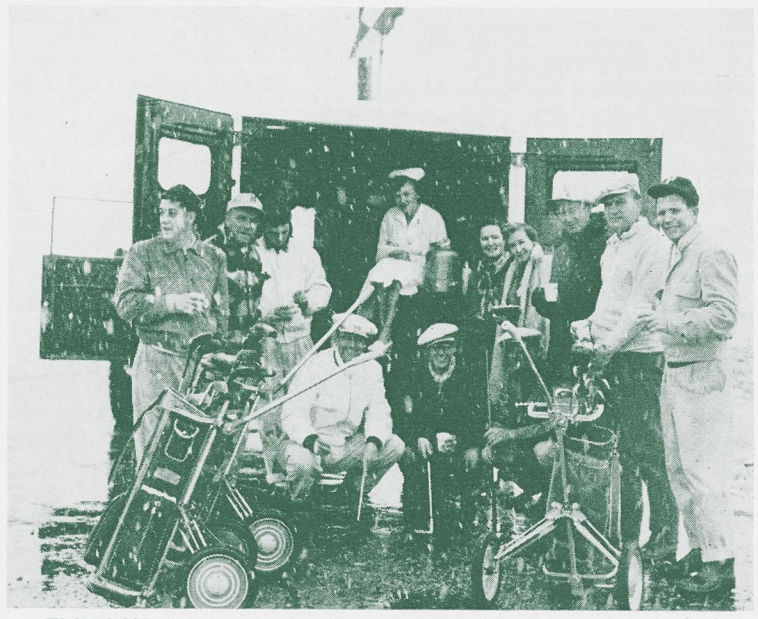
Power Plant Engineers

TEAMWORK SPIRIT has been augmented in Power Plant Engineering by monthly meetings of personnel. Last month Vice-president John Alison, right, was guest. He is shown with Bruce Bauer, Rocky Janasik, John Vroman, Don Biedermann, Chief Bill Holmes, Brad Richardson. Meetings are informal affairs.

TALK by Chief Engineer Dr. William Ballhaus was on agenda for Power Plant meeting. Seated, from left: Vice-president Alison, Bill Holmes, Don Biedermann. Primary aim of meetings: closer acquaintanceship Net results: closer teamwork among all the personnel.

Palmdale Section

CAN DO! Not only mailmen but Northrop-Palmdale golfers too can be depended upon to cover their routes even through snow—especially when it is in behalf of Can-Do, the facility drive to collect food for needy families at Christmastime. Foursome shown—Sam Ponton, Ernie Underwood, Ken Wood, Warren Symington—with rooters, on December 4 teed off from plant on scheduled 10 mile, jack-rabbit cross-desert course leading to the Antelope Valley Country Club.



ENTOURAGE of Palmdale golfing Can-Doers included refreshment truck, here shown serving up hot java amid falling snowflakes—surprise added attraction of day. Publicity angle on game called for losers to furnish one case of canned food each. As it turned out, it was not scores, but golfballs that were lost.

BUT CAN-DOERS DID DO! Although first game fizzled after two miles for lack of golfballs, repeat game was held December 11—a full ten miles, followed by the nine-hole regular course at the club. Losers—Ernie Underwood, Ken Wood, Warren Symington.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — Wednesday noon one week before publication.

FOR SALE

MG, 1952, engine recently overhauled, $950 or best offer. FLOYD J. WATKINS, OR 8-1548. A

SEWING MACHINE, Necchi portable automatic, $276 new, 3 mos. old. $175. J. G. CLARK, GL 4-2550. A

MERCURY, 1955 4-door sedan, Monterey, $500 equity wanted—take over payments $94 per mo. for 20 mos. F. F. VELLUTI, CHurchill 9-8854. A

REFRIGERATOR, 7 cubic foot Servel, good condition, must sell, $75. R. D. BAGBY, DA 4-5342. A

CHAISE LOUNGE, redwood (adjustable), inner spring mattress, $15. A. E. OLSON, NE 1-1341. A

TOASTMASTER, two slice, used only a few times, cost $24.95, $14.50. W. McEWEN. Write to Northrop News, Box 913. A

SIDE CURTAINS, full set, for MG-TD, need new Plexiglass, $25. DAVID E. CONKLIN, OR 4-2009. A

FORD, 1953, Victoria hard top, Ford-o-matic, best offer takes; CENTER FOG LIGHTS, fits grille 1949 and 1950 Ford, $5. W. E. PEITHMAN, DA 4-0930. A

BICYCLE, English lightweight, full size 26", 3-speed gear, hand brakes, generator lights, cost $125, never used, sacrifice $65. GR 8-6859. A

PAINTINGS, 2 large and 3 small oils (knife and brush work), 4 water colors, subjects: landscape, boats, seascape, still life, abstractions. $5 to $150. VIOLET TAYLOR, OS 6-0596. A

FORD, '52 Victoria, Ford-o-matic. $1095. OR 8-7318. A

REFRIGERATOR, Westinghouse, like new, 8.5 cu. ft., $35. IRA C. HAWKINS. PL 6-1687. A

BICYCLE, boys', 26", good condition, $8. MARY E. MAKIN, OS 6-7055. A

DOG HOUSE, California redwood, guaranteed rainproof, insulated, light weight, 25" wide x 35" long x 34" high, excellent condition, $12; Nesco ELECTRIC ROASTER, largest size, holds up to 20-pound turkey, fully automatic, built-in time clock, complete, including cabinet, $35. L. A. OHLINGER, OR 8-5958. A

CHEVROLET, 1952 4-door special deluxe, white s/w tires, Power Glide, $900 CLAYTON C. ADAMS, DA 9-5804. A

RADIO, Hallicrafter, model S-38, $30. DON MILLER, PL 4-7958. A

FORD, '55 Fairlane club sedan, 182 h.p., V-8, Ford-o-matic, $1995. JAMES WILSON, OS 5-2518. A

BOXER PUPPY, 3 months old, fawn, championship stock, $45, or, ears cropped, ready by Christmas, $75. BETTY KEETON, NE 8-1722. A

SCOOTER, Allstate, 1955, 3 h.p., spare tire, $160. FR 9-9249. A

DUAL CARBURETOR for '49-'52 Olds manifold, carburetor and linkage. R. M. LARUE, OR 2-6804. A

RIFLE, 30-30 Winchester, model 94, fired once, carrying case, Outers cleaning kit, $70. D. GULSERIAN, OS 5-6449, after 3:45 p.m. A

RIFLE, 7mm sporter, maple and walnut stock, Weaver K-4 scope, entirely custom. MONTE HALBERG, OS 6-5949, evenings. A

TYPEWRITER, Royal portable, with carrying case, near new, $50. JESSE BRANT. Write to Northrop News, Box 912. A

TWO WHEEL TRAILER, new tires, 4'x7' box needs repair, $25. FR 4-2505. A

BICYCLE, 20", boy's, new paint, A-1 condition, training wheels, $17; TYPEWRITER, Corona portable, excellent condition. DOROTHY POE. OR 2-4774. A

NASH, 1950, 4 newly retreaded tires, $250; PONTIAC, 1941, rebuilt motor, $75. WALTER CLARK. FR 2-4492. A

MODEL "A", '29 4-door, two extra new tires, headlights and odds and ends for repairs, $75. LEWIS KENDALL, AX 3-0623. A

TV, Hoffman 17" table model with stand; baby CAR BED and BUGGY combination; PLAY PEN; STROLLER; BATHINETTE; BASSINETTE. R. A. MAGIN, PL 3-8950. A

VACUUM SWEEPER, Airway, like new, all attachments. $60 cash. DA 4-1719.

TYPEWRITER, old Hammond, portable, with removable type-bands, uses standard vari-typer type-bands, presently equipped with "italics" decorative type, in good working order, will accept any reasonable offer. L. L. BALSAM, GR 8-4784. A

FORD CONVERTIBLE, 1951, overdrive, best offer. ROBERT L. BURR. FR 9-6308.

ELECTRIC REFRIGERATOR, Coldspot, 9 cu. ft., good operating condition, exterior like new, $50. C. P. SHELLY, ME 0-2941. A

AQUA LUNG, single phase regulator with 60-minute positive reserve tank, cost $140, 6 months old, $90. PL 9-1368 after 5 p.m. A

TRICYCLE, large size, chain drive, 1 year old, good condition, $20. N. J. HAMILTON, GA 5-7550. A

OUTBOARD MOTOR, 2½ h.p., Muncy made by Neptune, $25 full price. PL 6-4952. A

FOR SALE

DIAMOND RING, man's, $200; ladies' figure ICE SKATES, $9; HOLLYWOOD BED, $35; 17" G.E. mahogany TV, $60; BED DIVAN, $20; 670-15 black TIRE, $3; new BUMPER JACK, $4. LUCKY DUNCAN. Write to Northrop News, Box 910. A

POLAROID LAND CAMERA, never used, sells for $90, will sell for $65. L. H. ROBERTS, DU 2-0073. A

WELDING OUTFIT, Craftsman A.C. arc, 75, 60, 45, 30 ampere outlets, input 110 volts, 60 cycle, A.C., takes up to ⅛ inch rod, used twice, $70, two pair gloves, about 10 pounds of rod, wire brush, cutters, plugs and mask included. JACK E. OLSON, OR 2-4530. A

BICYCLE, girl's, 24" J. C. HIGGINS, light blue and white, good condition, $15. WALLY KUEGEMAN, OS 6-9989.

WARDROBE CLOSET, very good condition, with hanging space, shelf and bottom storage, simulated wood exterior, 5' high and 2' wide, very reasonable. C. M. SULLIVAN, PL 6-4458. A

TV, Packard-Bell, 17" table model, mahogany, including swivel table with casters. $65. KARL KUPSE, OR 7-7039.

TRUCK, International panel, heavy duty ¾, excellent shape; VIOLIN, Casper de Salo; miscellaneous TV and RADIO PARTS. OS 6-8250. A

ELECTRONIC CAMERA, flash unit, A.C. or D.C. with 25 ft. extension head, cost $150, $75. DICK SHEETZ. Write to Northrop News, Box 907. A

BUICK, 1952 Riviera Roadmaster hardtop coupe, Dynaflow, $1095. OPAL O. SPRINGER, OS 6-4293. A

RADIO-RECORD PLAYER, Zenith portable, has 7-tube radio and automatic 78 rpm record player, record player needs new tone arm, best cash offer. R. H. SPRINGER. OS 6-4293. A

HOME, 4-bedroom, Hollywood Riviera, 1 and ¾ baths, large living room and dining area, large kitchen, utility room, 2-car garage, patio, fully landscaped, ocean view, $21,500 full price. $2500 down. ROBERT ROPER, FR 5-8600. A

FORD, 1940, 4-door, lowered, $100, PL 5-9470, evenings. A

TV, 17" Zenith, mahogany console, excellent condition, new picture tube, $75; like new BIKE TRAINING WHEELS, $3.75. MAX STERN. DA 4-6748. A

FUR COAT, top quality mouton stroller, excellent condition, size 12-14, dark brown, cost $250, $50; SUITCASE, Oshkosh two-suiter, good condition, size 18"x24"x8" deep, brown color. $10. OR 2-5649, after 5:00 p.m. A

DRAW DRAPES, five pair dark green. J. F. CARSON, PL 7-1922. A

LAUNDRY TUB, porcelain, like new, 19"x22"x11". $5; 20" boy's Schwinn BICYCLE, $15; sidewalk girl's BICYCLE, $8; VENETIAN BLINDS, various sizes, excellent condition, one set fits any size bay window up to 80 inches. B. B. LEVITT. AX 4-3095. A

CHEVROLET, 1949, 2-door sedan, rear seat speaker, $400. UNDERWOOD, FR 9-5761. A

MOTORCYCLE, 1955 AJS Scrambles model, less than 3000 miles, $675; set of BARBELLS, DUMBBELLS and SPRING EXERCISERS, $25; '49 FORD with '51 grill and pipes, $275. W. T. FERRIS, PL 5-4114. A

FORD COUPE, 1939, 5000 miles since complete overhaul, $100 or highest bidder; BABY CRIB and mattress, large size, $10; FUR COATS, one muskrat full length, and one white wolf jacket. K. G. HART. FR 2-2514. A

WASHER, Kenmore, excellent condition, $30; BEDROOM SET, coil, springs and mattress, very good, $100; Craftsman combination WELDING AND CUTTING OUTFIT, used one day, $70; 30-06 Springfield RIFLE, $50. MILDRED LIBBY. Write to Northrop News, Box 925 A

WASHER, Maytag, wringer-type, very good condition, $50. WANDA WALTON, TE 5-3393. A

PICKUP TRUCK, 1936 Ford, 4-gear, $75 or make offer. B. J. PACKARD, FR 9-3739. A

OLDSMOBILE, 1949, "88" 2-door sedan. J. P. DICKEY. Write to Northrop News, Box 905. A

WRINGER WASHER, Maytag, $25; green wool RUG, 10'x15', $70. TE 3-3334, evenings or week-ends.

CHEVROLET, 1939 coupe, needs work only on transmission, $25; AUTO RADIO for '42 Buick, $15; CAR HEATER, fits most cars, $7; BABEE TENDA, $7, or make offer. LOUIS ARCHER, DA 4-0942 (message). A

PHOTO SOUND COURSE, in code, Electronic Tech. Institute, Vol. I, basic, Vol. II, 4 WPM to 10 WPM, both excellent condition, $15; TABLE, kitchen, leaf type, $7; ROLLS RAZOR, Viscount model, $5. PL 9-3697. A

BEDROOM SET, modern; Whirlpool WASHER; Philco REFRIGERATOR; Gaffers & Sattler RANGE; modern CHEST with planter top, must sell. DAVID GREENE, OR 2-0773. A

FOR SALE

BOXER PUP, 7 mo. female, loves children, best offer. B. A. WOOD, OS 5-4357. A

RUG, 9'x12' Oriental with pad, $60; 2 matching THROW RUGS, $5 each; 2 planter TABLE LAMPS, $5 each; SECTIONAL with matching CHAIR, $50; 3 THROW RUGS, $1 each. PL 6-7337. A

SERVI-CYCLE, good condition, reasonable; also boy's BIKE, 3-speed lightweight. OS 6-8890, between 10 a.m. and 4 p.m. A

PEKINGESE, miniature type, female, red, black mask, champion bloodlines, $75; also beautiful PUPPIES. GA 9-7737. A

ROLLER SHOE SKATES, two pair Chicago, A-1 shape, $10 per pair, shoe sizes 9 and 9½; one pair HOCKEY SHOE SKATES, size 9, $6. C. A. WINTERS, EX 9-3897. A

HOME, 3-bedroom, lots of cupboards, book shelves, dishwasher, enclosed yard, $2000 down, $11,500 total price. Redondo Beach. FR 2-5987. A

PLYMOUTH, 1932 coupe, 4 cyl., 16" wire wheels, new clutch, seal beams, needs rings. $35. DON GRAY, FR 4-8784. A

HOUSE, near Crenshaw and Compton Blvds. 2-bedroom, w/w carpet, covered flagstone patio, eating area in kitchen plus dinette, block fence, $950 down, vacant. PL 8-2098. A

TWO-WHEEL TRAILER, two extra tires and tubes, new watertight canvas top, $60. MELVIN LILLIG, OS 5-5663. A

TV, 16" General Electric, floor model, mahogany cabinet, recently overhauled, $37. DA 4-8177. A

FORD COUPE, '39, pipes, lowered, decked. $150 cash. RANDLE, FR 4-2590.

TYPEWRITER DESK, walnut; blonde COFFEE TABLE; 2 END TABLES; OCCASIONAL TABLE, all with black glass tops; modern DAVENPORT; 2 corner CHAIRS; gray drop-leaf chrome DINETTE TABLE and 4 CHAIRS; O'Keefe & Merritt GAS RANGE; Servel REFRIGERATOR, 6 cu. ft. All prices reasonable. H. G. RATHENBERGER, NE 1-8048. A

HOUSE TRAILER, 22 ft., Angelus 1947, nice looking, excellent condition, electric refrigerator, $650 or best offer. JOHN VETTER. Write to Northrop News, Box 903. A

BOWLING BALL, BAG, SHOES, man's, reasonable. L. G. EVANS, OS 6-4840. A

ELECTRIC TRAIN, Lionel, "O" gauge, remote controls, transformer and accessories, like new, $35. RAY LAPALME, DA 9-4065. A

TRAIN, Lionel, "O" gauge, completely mounted, plus accessories, make offer. D. Y. COLE. EX 6-1681. A

M.G., 1953 MK-11. H. C. SPELLER. Write to Northrop News, Box 902. A

PIANO, Clark and Story, upright, $125. THELMA E. McGARRY. FA 8-7598. A

TRAILER, 1955 Angelus, 35' long, excellent condition, red and white, bathtub and shower. Can be seen by appointment. OS 6-1150. A

HOUSE, new, 3-bedroom, carpeted, tile features, disposal, double garage, R-2 lot, close to Northrop, $3500 down, $13,950 full price, good financing. OR 4-1711. A

DACHSHUND PUPPIES, registered A.K.C., champion bloodline. MARY PATTERSON, FA 8-7691. A

ELECTRIC DRIER, Westinghouse, never used, 1955 model, $145; 2 PARAKEETS, with cage, beautiful, $5 for birds and cage. THERESA PITIAK, OR 2-1511. A

TWIN MATTRESSES AND SPRINGS, foam rubber, practically new, $75 for both sets or will sell separately $40 each. WE 9-4859. A

TRAILER, 26', 1950 Alma (eastern made), tandem, toilet, shower, light birch paneling, new awning, bamboo patio curtains, $1495. PAUL RISENER. Write to Northrop News, Box 901. A

LOT 68'x124', all utilities. Next to new high school, close to new shopping center. $25 dn., $25 mo. No interest, or any other charges, to Norcrafters. FRANK PIWOWARSKI FR 5-0352. A

WASHER & DRIER Westinghouse, in good condition $500. A. C. DELL. Write to Northrop News, Box 916. A

GAS WALL HEATER, 1 U-Ni-Matic #12. 4000 BTU per radiant, 3 radiants, $3. B. E. RUNSWICK, OR 7-3514. A

PONTIAC, 1941, 4-door sedan, $60. ROY McLAUGHLIN, PL 8-5785. A

BICYCLE, boy's 26" lightweight 3-speed; LATHE CHUCK, Cushman 5" dia. 3 jaw, two sets of jaws, good condition, make offer. PL 2-9597. A

PLYMOUTH, 1937, $20; 5 gallon TANK for '53 B.S.A. Golden Flash, $20; Dunlop 3:25x19 Knobby SPORTS TIRE, almost new, $11; Cromwell size 7 CRASH HELMET, $9; Triumph Nacelle HORN, $2; SPEEDOMETER for A.J.S., $5; stock '52 Ajax MUFFLER, $6; 100 Popular Mechanics MAGAZINES 1908-1929, make offer. HAROLD W. WARNER, OS 6-8651.

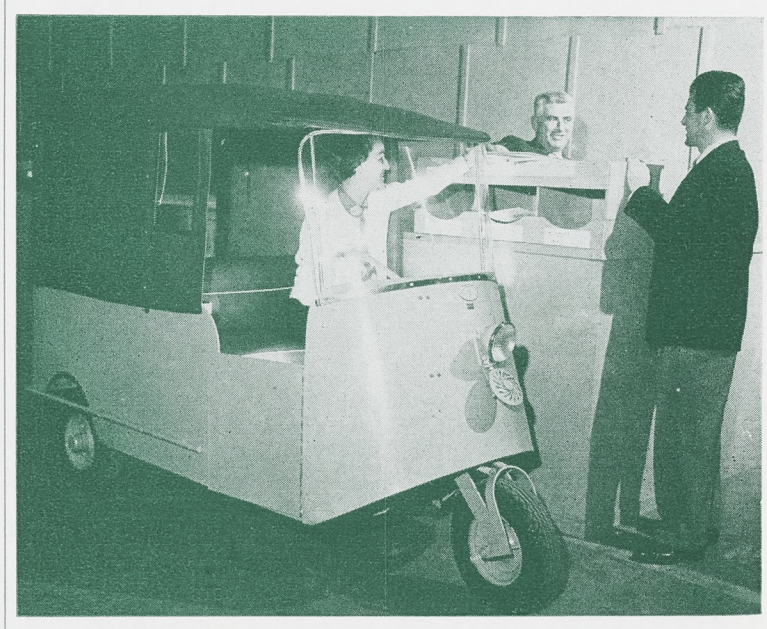
CHEVROLET, club coupe, new 2 yr. battery, $65. Write Northrop News, Box 915. A

CHEVROLET, 1946 club coupe, $275 or best offer. TOM SELLINGER. EX 6-3594.

MODEL "A" COUPE, 1930, body & engine good. JAMES C. HOVEY, FR 9-2135. A

WALL HEATER, panel-ray, excellent condition, $20; USED LUMBER from 40'x40' building, including 2x8 girders, 2x4, and 1x6, completely dismantled. Will sell all for $50. Must be moved from location at once. J. R. REED, DA 6-5558.

Mail Center Installation Helps Speed Deliveries



NEW LOOK—. Recent streamlining of Mail Service operations at Mariposa and Maple Street, Materiel division, has been expedited by purchase of Autoette shown here with Mail Service Leadgirl Darlene Gunion at wheel. Darleen delivers mail to newly installed Mail Center (see pic below) as Lee Schwartz, general supervisor, Materiel Services, right; and Ray Strong, general foreman, Shipping, discuss new mail system. Successful Mail Center idea was initiated by Schwartz. Autoette speeds deliveries and eliminates long walks.

OPERATION CO-OP—. Mail Center idea originated by Materiel division has been successfully adopted by Engineering division under direction of Keith Thurston, general supervisor, Administrative Services. Here Mail Service leadgirl Dee Rivello sorts mail for pick-up by Engineering secretaries, left, Dianne Cutler, Kenny Butler, and Pat Carlberg. Plans are being formulated to install the Centers in all plants.

FOR SALE

LEATHER JACKET, man's, size 46, one month old. C. A. UNDERWOOD, OX 3-7354. A

POMERANIAN, Golden, 1 yr. old, AKC reg., has had rabies shots, good around children, reasonable. E. D. SPILLER, JR., FA 8-1482. A

MOTORCYCLE, 1946 English Excelsior, good condition driven less than 5000 miles. $150. ORLANDO OLSON, WE 1-7085. A

AUTOMATIC WASHING MACHINE, 1954 model Kelvinator good condition, used 1 year; 1954 Kelvinator electric CLOTHES DRIER, $130 each or $255 for both; kitchen porcelain TABLE with two leaves. $12. LILLY T. BEST. PL 5-4459 after 5 p.m. A

REFRIGERATOR, Hotpoint, 6 cu. ft., like new, original price $170, sacrifice $75. FR 4-5763 after 5 p.m. A

MERCURY CONVERTIBLE, '49, new trans. and overdrive needs top, $275. DANIEL STOTTS. Write to Northrop News, Box 917. A

RIFLE, Winchester model 70, 30.06, used once, 1 year old, 20 rounds of shells, $135 new, sell $85; near new Polaroid Land CAMERA and Polaroid METER, camera and meter $82 new, sell $45. R. A. ANDERSON. Write to Northrop News, Box 922. A

VACATION TRAILER, 14 ft., sleeps 5, Traveler, used 5 times, $1000 value, $695 plus $30 for new awning. PL 5-6610. A

CHEVROLET, 1948 convertible, fully equipped, $275 or best offer. R. DE SMET, OR 5-6022. A

FOR SALE

HOME, Westchester, 3 bedroom, fireplace, recently redecorated, 2 blocks from schools, shopping, transportation, includes drapes, curtains, G.I., resale, $15,450 full price. S. R. MURNANE, OR 2-2634. A

DODGE COUPE 1940, $50. OR 2-9206. SKID CHAINS, 7.10x15 size, never used, $5. A. L. GUNTHER, FR 5-1514. A

CHEVROLET, 1950 2-door sedan, new motor, $400 cash. BETTY WILLIAMS, OR 7-2934 before 3 p.m. A

PHOTOGRAPHIC EQUIPMENT: all chrome Komine pan head, $3; Kodak projection print scale, $1; lab thermometer 12", $3; various chemicals, film clips, etc. to highest bidder. HO 4-7747 around 3 p.m. A

CRIB Babyline, grey embossed, foot, headboard and springs, good condition, $20, cost $49.50 new. L. H. ROGERS FR 4-5286. A

HOME, 3 bedroom, ½ block from school, near new market, $11,000. C. R. HOLLAND. Write to Northrop News, Box 920. A

LA SALLE convertible, 1940, $50. STAN EHLINGER. NO 2-5282. A

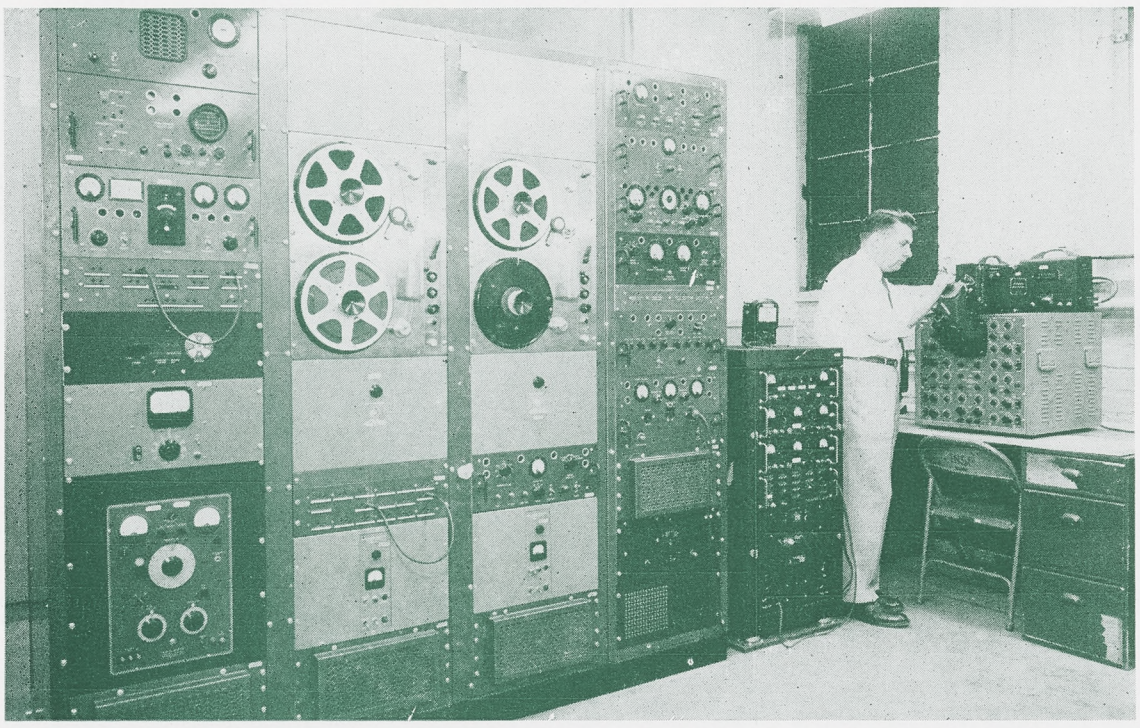
LINCOLN, 1947 1948 Mercury engine, overdrive, $225, pay next year. W. S. COOK, DA 6-2467 evenings or week-ends. A

STUDEBAKER, 1952 4-door Champion, overdrive. $450. OL 3-4145, evenings. A

DEEP FREEZE, 21½ cu. ft., chest type, storage compartment attached, excellent condition, 2 yrs. old. OS 5-7993. A

(Continued on Page 6)

Instrumentation Engineers Coordinate Efforts With Installation Here



ONLY PART is shown of complex equipment which fills entire room in Hawthorne as telemeter ground station. Nat Albin, of Instrumentation Systems Engineering, is shown operating oscilloscope in connection with flight telemeter playback. Installation of station has smoothly coordinated efforts with MTF.

Long and careful planning by Flight Test Instrumentation has culminated, in the past few years of missile flight testing, in a program that has increased the efficiency and accuracy of missile instrumentation.

With the installation of a telemeter ground receiving station in Hawthorne, the long communications line between Hawthorne and the missile test facility in Florida has been shortened, and the exacting engineering efforts of personnel at both bases smoothly coordinated.

Engineers point out that although a complete missile instrumentation system is composed of many components, the basic unit is the telemeter. By definition it is that equipment which embodies the science of measuring a quantity, transmitting the result to a distant station, and there indicating or recording the quantity measured.

In engineering terms that are difficult to break down into everyday terms, the airborne telemeter system is composed of a multi-channel sub-carrier system which modulates a VHF (very high frequency) radio transmitter. By a procedure called commutating, most of the airborne sub-carriers can transmit a great number of information channels over a single radio link.

The system is involved, presenting a challenge to instrumentation engineers at Northrop, as well as at other companies. The various end instruments used to get information such as airspeed, altitude, engine rpm., and control position must be carefully selected for compatibility with the telemeter.

In many cases the available end instrument cannot be fed directly to the telemeter, and the engineer must design adapting circuitry. To do this efficiently requires the use of the telemeter ground receiving station.

Basically, the station has a radio receiver and various additional components to separate and record the numerous airborne data channels. The station components use several hundred vacuum tubes to provide these functions; thus, special skills are needed for proper operation and maintenance.

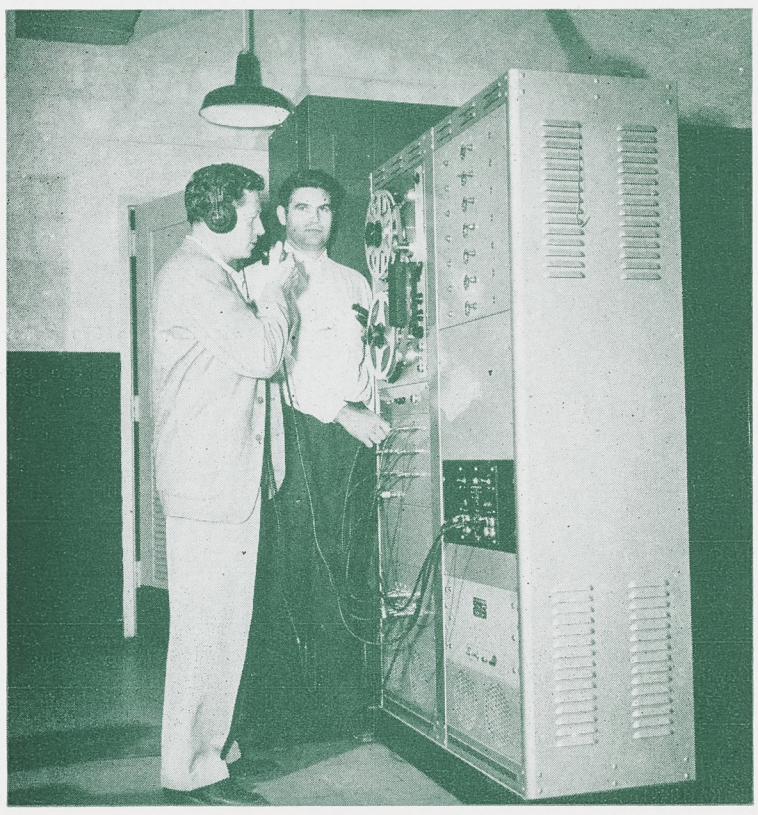
Norcrafters have several years of experience in the operation of their own ground stations, first gained in early missile experiments in New Mexico. Use of the telemeter ground station there enabled instrumentation engineers to evaluate at first hand—without contact with distant sources—their airborne telemetry and instrumentation operations.

The experience has aided materially in advancing the state of telemetry. Occasionally modifications to manufactured telemeter equipment were effected to more nearly conform with operations; some of these Northrop-designed improvements have been incorporated by the manufacturers themselves, and have become an integral part of modern telemeter equipment.

Today's instrumentation operations are even more complex, but the installation of the ground station here has made it possible to coordinate efforts at both sites to the ultimate good of the entire program.

In addition to the system evaluation tests, the ground station is used to get useful data from tape recordings made of telemetered signals at the Florida base. Faithful playback of the tape makes it possible to reproduce, in effect, the actual flight from which the recording was made. Data are separated, and the individual information functions recorded on oscillograph for use by the Data Analysis section.

Every day Instrumentation engineers find new uses for the telemeter ground station. In fact, station facilities are in such demand that operation is now on a two-shift basis, with Instrumentation striving to maintain the most accurate compilation of data possible.



ENGINEERS set up tape recording system at Florida test base to get record of data from flights. At left: Robert Prindiville, Hawthorne Instrumentation Calibration and Test. Right: George Christen, of MTF facility. Tape can be played back at home base, simulating flights.

HOLLOMAN AFB was scene for part of "Threshold of Space" film featuring experiments of Lieutenant Colonel John P. Stapp on Northrop deceleration sled. Norcrafters Jake Superata and Gordon Nelson (left) appear in film. They are shown with late John Hodiak, who plays part of Colonel Stapp, and Ray Binyon.

Norcrafters Aid Filming Of Colonel Stapp Movie

Norcrafters have played an important part in the filming of the motion picture "Threshold of Space", featuring Lieutenant Colonel John Paul Stapp's experiments with the Northrop deceleration sled. The picture is now being completed on the 20th Century-Fox lots after more than a year of research and six months of location shooting.

Gordon Nelson, Air Safety, and Jake Superata, Engineering Lab Services, appear in the picture, in which the AF officer is played by the late John Hodiak. George Nichols, Air Safety, and other Norcrafters contributed to the film in the building of special Cinemascope camera supports to provide the audience with a Colonel Stapp-view of a 625-mile-per-hour ride down the track.

Cameraman Joe McDonald arranged a mirror and camera setup at the end of the track to photograph the sled head-on as it came down the track. He now enjoys telling the story of how Nelson calculated the exact position for the mirror, which had to be in the middle of the track. Object of the calculation was to provide an extreme close-up when the sled came to its abrupt rest without breaking the mirror.

The sled stopped within inches of the mark, and 20th Century personnel gained high respect for aircraft engineers!

Nelson and Superata later appeared with Colonel Stapp on the TV "This Is Your Life" show. Northrop motion picture film showing the high-speed land sled experiments at Holloman AFB was used in this program, as well as in the movie and other programs. Norcrafters Felix Barlow and Val Hawes shot most of the footage, which by now has become known the world over.

L A Announces Plans for Civil Defense Dispersal

A Civil Defense interim dispersal plan has been formulated by the city of Los Angeles, Northrop CD Coordinator Jerry Baker has reported, with the view in mind of employing dispersal as a means of reducing vulnerability and saving lives.

Under the recently-announced program, the city is recommending the dispersal of population to the suburban areas and to their homes upon the sounding of the "alert" signal. The mayor and his CD advisors have indicated that this is a recognition of the basic instincts of people for self and family preservation during an emergency.

The plan ties in with the type of program in effect at Northrop. Last April Baker announced a plan whereby personnel will be directed to go to their homes in the event of disaster, when there is ample warning time for such action.

A second facet of the city program is the movement of people from downtown, "sensitive" areas by mass transportation to less thickly-populated sectors, and away from possible "fall-out" pattern.

There is increased emphasis on the family's own plan for uniting its members in both the city and Northrop programs.

"With school-children going home, and industry personnel being dispersed in similar fashion," Baker pointed out, "it is increasingly important that each family establish firm plans to communicate with each other in the event of emergency. This can be done by making arrangements right now for some central point which can be used for contact if the family is separated."

F-89 MODELS

Just in time for Christmas is the new Scorpion model kit.

Now available at the Company Personnel Service tool store, the new Scorpion kit builds the "D" rocket-pod airplane. It is made of plastic. Details are authentic and remarkably complete. Wingspan is 8¾ inches. Mounting base is included.

Price is 89¢.

The model is made and wholesaled by Revell Industries. Coordination of details was handled by Martin Hunt, of Customer Field Service, in cooperation with Public Relations.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 2)

MANCHESTER & WESTERN, Los Angeles. (Route: Normandie to Imperial to Crenshaw—Plant 1 to Plant 3). PAULINE HART (5622-24120, Ext. 2133, 1270), PL 2-3052. 12-2

(Zone 3)

SAN PEDRO & 74TH, Los Angeles 3. (Prefer car pool, will accept riders or will ride with someone.) THOMAS HOLLIS (5518-41894, Ext. 2792 or 1280). PL 9-3402. 12-3

(Zone 4)

IMPERIAL & LAKEWOOD, Downey. (Will pick up anyone along Imperial from Lakewood Blvd. to Plant, or anywhere along E. El Segundo to Plant.) M. KRAVETS (5502-18009, Ext. 2741). TO 9-8937. 12-4

(Zone 8)

CRENSHAW & TORRANCE BLVD., Torrance. LEO A. LABRIE (5587-41632, Ext. 1947). FA 8-1848. 12-8

(Zone 9)

TORRANCE BLVD. & HAWTHORNE BLVD., Redondo Beach. (I will be glad to drive anyone from and to Redondo Beach, Hermosa Beach or any beach cities, including any place between Northrop and Redondo Beach.) ALLEN A. MOUCHESON (5508-38145, Ext. 2755). FR 5-2723. 12-9

(Zone 10)

PIER AVE. & 101 HWY. or Pier & Prospect, Hermosa Beach. (Have room for 2 girls. Route: Aviation Blvd., Manhattan Beach Blvd., Hawthorne Blvd. to 147th St. & up Prairie). V. I. BONE (5504-22230, Ext. 1808). 12-10

7:30 a.m. — 4:15 p.m.

(Zone 1)

FOOTHILL BLVD. & RAMSDELL AVE., La Crescenta. (Will pick up in La Crescenta, Verdugo City, Montrose or Glendale. Will deliver at Plant I, II, or III.) MELVIN L. DUNBAR (5700-31869, Ext. 2053). CH 9-6305. 13-1

(Zone 5)

GARDEN GROVE AREA. (Route: Seventh-Studebaker - Carson - Cherry - Del Amo - Wilmington - 174th - Crenshaw. STEWART (3130-38215 Ext. 1558). HE 4-5057. 13-5

(Zone 9)

PALOS VERDES DR. & 101, Redondo Beach. (Car pool desired.) EVELYN GILBERT (3144-12547, Ext. 1846). FR 5-6267. 13-9

(Zone 10)

POINSETTIA & 9TH, Manhattan Beach. (Manhattan Beach Blvd., Hawthorne Blvd., Broadway to plant. Can take 4 or 5 riders). MARIE TAYLOR (4220-14007. Ext. 642-643) FR 2-7268. 13-10

MANHATTAN AVE. & 19TH, Hermosa Beach. (Manhattan to Gould to Red. Bch. to Prairie, to Plant I.) R. E. BOWMAN (4240-31320, Ext. 1985.) FR 2-1236. 13-10

(Zone 12)

CULVER BLVD. & INGLEWOOD AVE., Los Angeles (66). (Will join or form car pool originating in Mar Vista area). M. SETZER (3142-30661, Ext. 2022). EX 8-7814. 13-12

3:45 p.m. — 12:15 a.m.

(Zone 5)

ROSECRANS & PIONEER BLVD., Norwalk. OTTO EBNER (5411-17439, Ext. 1491), TO 3-9542. 16-5

4:45 p.m. — 1:15 a.m.

(Zone 8)

WALNUT & LOMITA BLVD., Lomita. (Car pool considered). ALBERT A. SHETLEY (5587-41674, Ext. 1947). DA 6-9939.

(Zone 14)

FAIRFAX & BEVERLY BLVD., Los Angeles (36). (Will pick up anywhere along La Brea south of Beverly Blvd.). P. FRIZLER (5509-19953, Ext. 7025), WE 9-1578.

Miscellaneous (Split Shifts)

(Zone 9)

HAWTHORNE BLVD. & IMPERIAL, Inglewood. (I can go by El Segundo Blvd. or any way betwen Imperial & El Segundo Blvd. Hours: 4:00 p.m. to 12:30 a.m.). CLEO C. COLEMAN (6455-42264, Ext. 3-1281). 20-9

Buy Bonds Today

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 1)

PICO & 12TH, Los Angeles 19. JOHN W. GOODSON (5162-14730, Ext. 548). WE 3-4089. 2-1

(Zone 2)

CENTURY & VAN NESS, Los Angeles. C. R. STOCKER (5222-22305, Ext. 1920). PL 4-5909. 2-2

NORMANDIE & 66TH or Florence, Los Angeles. DOROTHY VERMILLION (5507-36384, Ext. 564). 2-2

(Zone 3)

SAN PEDRO & 74TH, Los Angeles 3. (Prefer car pool, will accept riders or will ride with someone.) THOMAS HOLLIS (5518-41894, Ext. 2792 or 1280). PL 9-3402. 2-3

OLYMPIC BLVD. & INDIANA ST., Los Angeles (23). ARTHUR FERNANDEZ (5621-3997, Ext. 1852. AN 3-7620. 2-3

(Zone 4)

IMPERIAL & LAKEWOOD, Downey. (Ride wanted or will form car pool from vicinity of Imperial and Lakewood or between Firestone and Imperial on Lakewood.) M. KRAVETS (5502-18009, Ext. 2741). TO 9-8937. 2-4

(Zone 5)

SOUTH & CHERRY, Long Beach. GEORGE C. CLEMENTS (5251-19826, Ext. 2576). GA 3-3474. 2-5

(Zone 6)

PACIFIC ST. & CHESTNUT AVE., Long Beach. HELMAR SKOGSBERG (5508-42164, Ext. 2755). 2-6

CARSON & ORANGE, Long Beach (7). G. J. GRUMMER (5161-14909, Ext. 2071), GA 7-4370. 2-6

(Zone 9)

ANZA & CARMELYNN ST., Torrance. (In the new Southwest Park tract off 190th St.) E. S. HUBERT (5507-19179. Ext. 526).

FIRMONA & 145TH, Lawndale. FAY HENSLEY (5504-13819. Ext. 1424). 2-9

PRAIRIE or CRENSHAW & 180th PL., Torrance. (Need ride one way only, home at night). C. V. STEMP (5507-19191, Ext. 526-564), DAvis 9-6462. 2-9

(Zone 12)

SANTA MONICA BLVD. & 23RD STREET, Santa Monica. HARRY PAWLING (5518-21267, Ext. 1383). EX 9-3727. 2-12

(Zone 14)

CRENSHAW BLVD. & SANTA BARBARA, Los Angeles 8. ELIZABETH DREVES (5621-23991, Ext. 2649). AX 1-2048, after 5 p.m. 2-14

7:30 a.m. — 4:15 p.m.

(Zone 1)

SANTA MONICA & VERMONT or SUNSET, Los Angeles 29. JACQUELINE MORSE (3315-12933, Ext. 477, 412).

(Zone 4)

IMPERIAL & S. VERMONT, Los Angeles 44. M. E. FOST (5100-14218, Ext. 469). PL 6-4736. 3-4

(Zone 7)

OCEAN ST. & NORMANDIE or Vermont, Torrance. JEANNE GARZA (1421-12229, Ext. 691). DA 6-2567. 3-7

(Zone 9)

PALOS VERDES DR. & 101, Redondo Beach. (Car pool desired.) EVELYN GILBERT (3144-12547, Ext. 1846). FR 5-6267. 3-9

INGLEWOOD AVE. & 164TH, Redondo Beach. CLAUDETTE FORBES (1421-39203. Ext. 1811). 3-9

VIA GUADALANA & VIA NOGALES, Palos Verdes Est. (Palos Verdes Plaza or close by is satisfactory pickup location. Ride wanted in evening only). E. LUNDQUIST (8610-44403, Ext. 667). FR 5-6395. 3-9

MADISON & 226TH ST., Torrance. (Madison & 226th is near intersection of Hawthorne & Sepulveda Blvds. I prefer a ride but will consider a car pool) RALPH CARRETTA JR. (3551-34450, Ext. 1420, 1428). DA 6-1985. 3-9

(Zone 10)

HERMOSA BEACH & 16TH, Hermosa Beach. MARGARET TISONCIK (5262-14425. Ext. 1669, FR 9-7797. 3-10

RUBY STREET & CAMINO REAL, Redondo Beach. LOIS A. WAGNER (4210-42407, Ext. 1893). 3-10

(Zone 12)

CULVER BLVD. & INGLEWOOD AVE., Los Angeles (66). (Will join or form car pool originating in Mar Vista area). M. SETZER (3142-30661, Ext. 2022) EX 8-7814. 3-12

CENTURY & FREEMAN or Hawthorne Blvd., Inglewood. JEAN ECONOMAKOS (1421-12207, Ext. 691.) OR 1-4361. 3-12

BBSF CLASSIFIEDS

(Continued from Page 4)

FOR SALE

FORD 1955 Fairlane convertible, overdrive, Marine going overseas. FR 4-5421. A

WRIST WATCH, Hamilton 14K gold, new $150, sell $35; LINCOLN, 1941, good condition, $75 cash. RALPH PARKHURST. Write to Northrop News. Box 918. A

PONTIAC, 1954 4-door sedan, has $500 worth of extras, $2300 equity for $350. WILLIAM G. PIKE. Write to Northrop News. Box 919. A

REFRIGERATOR, Kelvinator, 6 months old, across top freezer 40 lbs., 7.2 cubic foot with shelves in door, $150 cash NITA G. KING. FR 9-4582. A

CAR RADIO, Philco, $9.50. PL 5-2412. A

TRICYCLES for 3 yr. old, $1; 4 yr. old $2. 16 inch BIKE, need repairs, $4. DA 4-6748. A

BINOCULARS, genuine Nobilis 7x35 center focus, coated lens, leather case, straps cost $57, $45. FR 5-9407 after 5:00 p.m. A

STUDEBAKER, 1948 Champion 2-door sedan, $245. W. F. WAGNER, VE 8-4512. A

WASHING MACHINE, operates very well three years old, $20; 1938 PACKARD sedan. KEITH BEAUCHENE, LO 6-3441. A

MERCURY 1953 Monterey hardtop coupe, overdrive Mallory ignition, duo exhausts. BOB CALOF, OR 1-3229. A

TYPEWRITER; WAFFLE IRONS, excellent condition; pop up TOASTER; tenor GUITAR; MANDOLIN; UKELELE; VIOLIN; GARAGE DOOR SPRINGS. J. H. BUSH, OS 6-6449. A

STUDEBAKER, 1951 Commander V-8; Hydra-Matic, motor recently overhauled, $445; HOUSE DOORS (3), with hardware, $3 each. M. G. WILLIAMS, OS 6-7390. A

REFRIGERATOR, Philco, 7.6 cu. ft., beautiful condition, $75; INNERSPRING MATTRESS and box spring, twin size, one set only $10. M. SETZER, EX 8-7814.

REFRIGERATOR, Coldspot elect., good condition, $25. W. F. VALERSKY, DA 4-7623 after 6:30 p.m. A

FORD CONVERTIBLE, 1950, overdrive, white sidewalls. J. F. CARSON, PL 6-8649. A

GIRL'S BIKE, 28" Schwinn Panther, 2-tone green, good condition, $37.50. ELLA HENDERSON, FR 2-7227. A

GAS HEATER, cost $39.95, $20; CAR TOP CARRIER, $5; 15 ft. Wizard Restorer BOAT, control, water pump, bow cabinet, lots of extras. Make offers. ROY R. SIGMAN. Write to Northrop News. Box 924. A

REFRIGERATOR, 9 cu. ft., Servel. A-1 condition. $40. AL RIVOLI, OS 6-8959. A

TRUMPET with case, Olds Ambassador, cost $150, used 6 mos., $85. GR 8-2020.

G M W

7:30 a.m. — 4:15 p.m.

(Zone 14)

CENTINELA & HYDE PARK PL., Inglewood. F. D. MINER (3114-12768, Ext. 1935). OR 7-3508. 3-14

(Zone 14)

PICO & ROBERTSON or PICO & BEVERLY DR., Los Angeles 35. JEAN FERRUCCI (8320-37306, Ext. 1605.) CR 1-7310. 3-14

7:30 a.m. — 5:15 p.m.

(Zone 1)

SANTA MONICA & VERMONT or SUNSET, Los Angeles 29. JACQUELINE MORSE (3315-12933, Ext. 477, 412).

3:45 p.m. — 12:15 a.m.

(Zone 13)

WASHINGTON BLVD. & SEPULVEDA BLVD., Culver City. JACK POLANS (5538-42436, Ext. 525 or 2185). VE 7-2703.

4:15 p.m. — 12:45 a.m.

(Zone 2)

VERMONT & 51ST, Los Angeles. GLORIANNE JONES (9330-41955, Ext. 2228). PL 9-7498. 8-2

(Zone 6)

REDONDO BEACH BLVD. & NORMANDIE, Gardena. (Ride to anywhere in Gardena, near Vermont or Western and 158th St.) HARLEY F. TONEY (5586-42140. Ext. 1973). 8-6

(Zone 9)

HWY. 101 AT AVE. "C," Redondo Beach. J. D. VOORHEES (5573-41812. Ext. 1378, ask for Don), FR 5-1650. 8-9

12:15 a.m. — 7:15 a.m.

(Zone 1)

SANTA MONICA & NORMANDIE AVE. or Western Ave., Los Angeles. JACK C. GAJEWSKI (5501-42009, Ext. 2200 or 1814). NO 1-7655. 9-1

Miscellaneous (Split Shifts)

(Zone 14)

HEPBURN AVE. & 7TH AVE., Los Angelos. (Mariposa: Hours, 7:15 a.m. to 4:00 p.m.) MARGURITE MOSS (6150-25260, Ext. 661). 10-14

FOR SALE

CASH REGISTER, National; electric MEAT SLICER and SCALES. All in good condition; best offer takes; POMERANIAN, black toy male, age 6 mos., A.K.C. reg., must sell; make offer, OS 6-1607 or DA 9-5760. A

BUSINESS COUPE, 1941, with jump seats, $125. RAY GRISH. FR 2-4673. A

BOY'S SUITS, 2, size 16 and 18, like new, $7.50 each. WILLIAM C. WAREING, OR 2-1137. A

TRUMPET, Olds Ambassador, like new, reasonable. OR 7-0785. A

PLYMOUTH CONVERTIBLE, 1949, new top, brakes, cash or terms, $450. HELEN LILLYWHITE, FA 8-2323. A

UTILITY TRAILER 2-wheel, with car hitch and tarpaulin. $20. OR 2-7806. A

AUSTIN, 1949 sedan, new battery. $125. R. W. FEENY. EA 2-0646. A

WANTED TO BUY

TOYS, child's (age 5), sidewalk auto, airplane or truck (pedal or chain drive). DOROTHY POE. OR 2-4774. B

ROCKER, old-time one to use on porch for grandpa, low back, arms, pay $2; PING PONG TABLE. UNDERWOOD, FR 4-0348. B

TRAILER, 2-wheel, good tires, reasonable. C. A. ULERY. KE 5-7539. B

PING PONG TABLE, good shape, cheap. TOM KENDALL. Write to Northrop News, Box 906. B

SKI BOOTS, close to size 9 shoe, price open. BEVERLY JONES. GA 7-1324. B

TOOLS, metric socket and end wrench set, reasonable price. BOB HANNUM, TO 9-2700. B

FORD '34 PICKUP PARTS, fenders, body, bed, doors, frame, whole thing if you have it; need butane TANK like truck fuel tank; need JACK HAMMER. PL 4-4384. B

CEDAR CHEST, mahogany, standard size with self-lifting tray, must be in good condition reasonably priced. BEVERLY ANN PIERCE, OR 1-6486. B

HOUSETRAILER, anything over 15', will pay cash. ZIGMUND W. DETZ, AX 4-8374. B

FOR TRADE

CHINCHILLAS, herd of 20 with all equipment, trade for spinet piano or shop tools. E. FOREMAN, LOrain 6-6396.

FORD, 1948 V-8 Super 4-dr. sedc trade for Chev. or Ford pickup. PL 5-2412. C

FOR SALE OR TRADE

CHEVROLET, 1938 coupe, rebuilt motor, sell for $75 cash or trade on good 30-06 or 270 rifle. H. D. BOWERS, DA 4-3327. C

TRAILER HOUSE, 20' Sierra Madre, double bed, stove, refrigerator (new unit), sectional makes bed, breakfast nook, good tires, electric brakes. $650 or trade for down on 2 bedroom house. DORIS JOHNSON. Write to Northrop News. Box 904. M

LAND, 11/10 acres, near Riverside, Calif., small down, monthly payments, or trade for lot in Palos Verdes. LEO W. DAY. Write to Northrop News, Box 909. M

CROSLEY PICKUP, 1948, cast iron block, $75, or trade for motorcycle or ¼ midget racer; 1949 FORD "6" 2-door sedan, $250 or would like MG or trade on Aerocoupe or other small metal airplane. J. C. CLAYTON. Write to Northrop News. Box 914. M

MOTORCYCLES, 1955, AJS Scrambles, $600; W.R. HARLEY and racing equip., $350 or trade; WEIGHTS, BARBELLS and DUMBBELLS and SPRING EXERCISES, $25. W. T. FERRIS. PL 5-4114. M

FRIGIDAIRE. G.M., old model, fair condition; SURFBOARD, person under 100 lbs., balsa and mahogany; best offer or prefer to trade for automotive hop-up accessories for '46 Ford or what have you? J. D. VOORHEES, FR 5-1650. mornings. M

FREE (To be given away)

USED LUMBER, miscellaneous, 1/8 inch and ¾ inch by 6 inches by 12 foot, some even longer, must dispose of wood, first come first served. J. R. REED. DA 6-5558.. D

RENTALS OFFERED

APARTMENT, 2-bedroom, one extra room (screened hand painted patio), BBQ, tiled kitchen and bath, shower, available Jan. 1, lease, Torrance, $90. H. R. STEVENS. DA 4-3908. E

ROOM, home privileges, cooking, automatic washer, ironing and television privileges, garage, ½ mile from Northrop, $15 weekly. BETTY M. GROSS, OS 5-1626, after 5 p.m. E

ROOM, private home, 7-minute walk to Hawthorne Plant 3, $9 week; ½ of garage, $5 month. MELVIN LILLIG, OS 5-5663. E

APARTMENT, new deluxe, one bedroom, unfurnished, walking distance from Plant 3 on Crenshaw, available now, $75 mo. E. KALUNIAN, PL 3-6461. E

RENTALS OFFERED

APARTMENT, 1 bedroom, unfurnished, just redecorated, garage and garbage disposal, $75 per mo. H. F. HARRIS, OR 1-2219, after 3 p.m. week days, any time week-ends. E

SLEEPING ROOM, private bath and entrance, 4 blocks from Northrop, place to park car. GLADYS KENT, OS 6-6696.

ROOM AND BOARD, clean rooms, good food, pleasant surroundings, reasonable rates. R. L. FRAIM. Write to Northrop News. Box 908. E

DUPLEX, unfurnished, one bedroom, Torrance, $50 mo. R. M. McMASTER, FA 8-6567. E

TRAILER, 15 foot, has stove, lights, heat, refrigerator, double bed, modern, $25 month. LESLIE MATTHIES. Write to Northrop News. Box 911. E

APARTMENT, single, utilities paid, furnished, nice bath and kitchen, $45 month. AX 2-3123. E

APARTMENTS, deluxe new 2-bedroom, north of Northrop, unfurnished, $95. EARLINE HALLMARK, OS 6-1748. E

ROOM with twin beds, home privilege, $50 V. B. BELL. OS 6-1748. E

ROOMS, 2 bedrooms, Morningside Park home, kitchen privileges if desired, working ladies preferred. TV, garage, telephone, very attractive. PL 4-8289 after 2 p.m. E

APARTMENT, new one-bedroom, unfurnished and garage, $65, walking distance to Northrop, baby o.k., available Jan. 10. GEORGE E. HARRIS, OS 6-7860. E

HOUSE, two bedroom, one block to Northrop Plant I, redecorated, no garage, adults, $65 mo., water paid. T. A. MORIS. EX 6-0067 after 6:30 p.m. E

ROOMS, $7 & $8 a wk., shower or tub baths, any shift, men only, Hawthorne. OS 5-2885.

HOUSE, 2-bedroom furnished, garage, near Northrop, $95 per mo., available Jan. 1, school age children O.K. OS 6-1607 or DA 9-5760. E

HOUSE, 3-bedroom, garbage disposal, new hardwood floors, children O.K., walking distance to Northrop, $80 with water paid. OS 6-5687. E

RENTALS WANTED

HOME, two-bedroom, furnished, with garage, by Feb. 1, 1956, $85 per month, adults. GAIL V. SWANSON. Write to Northrop News. Box 923. F

HOUSE, 3 or 4-room pay to $15 week or $65 month. OS 5-6440, 12:00 to 4:00 p.m. F

CHILD CARE OFFERED

CHILD CARE, ages 3 to 10 yrs., lawn, play yard, fenced, lots of play equipment. Christmas and birthday parties. Hot lunches, naps and snacks. Near school, day or night shifts. P. W. SANDERS, OS 5-7993. G

CHILD CARE, will care for one or two children during daytime, nice home, 15-minute drive from Northrop. FR 4-2649. G

CHILD CARE WANTED

BABY SITTER wanted, steady job, vicinity of 167th St. and Crenshaw. DA 4-7656 after 4:30 p.m. H

LOST

STARRETT SCALE, 6", with initials J.L.A., rubber case, near or inside main building Plant 3, Thursday, Dec. 1. J. L. ARNDT. OR 8-8019. H

PONTIAC FENDER SKIRT, green, left in parking lot, corner Broadway & Prairie, Friday night, Dec. 9 would appreciate its return. JIM GRIDER, OS 5-6070, between 3 and 4 p.m. J

PERSONALS

GRATITUDE to Northrop Aircraft, Inc. and my fellow Norcrafters. I wish to express my deepest gratitude and am very grateful for the kindness shown me for the past 7 months during my illness. I sincerely hope that it won't be long before I can return to my work and see all of my friends. C. F. TEMPLETON. Dept. 5518. L

RIDE OFFERED: Driving to Sun Valley, Idaho, January 21, return to Los Angeles, January 28. Will take one passenger. Share travel expenses. DON BULL, FR 4-1152. L

THANK YOU for the flowers, cards, calls and visits I received from my friends and the Northrop Recreation Club during my recent illness. HERB SPERLING, Pasadena Optical Lab. L

RIDE OFFERED: Planning to drive to Las Vegas around Dec. 28 in new Ford; will take 4 riders, help drive and share expenses; return on Jan. 2, 1956. HO 4-7747 around 3 p.m. L

RIDE OFFERED: Leaving for Bay Area Dec. 24. LILLIAN KEMBLE. Write to Northrop News. Box 921. L

RIDE OFFERED: Leaving for Rhode Island and points east; take 3 riders to share gas expenses; call between 12:00 and 4:00 p.m.; leaving Dec. 24, 9:00 a.m. MANUEL J. GONSALVES, OS 5-6440. L

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
League play now in progress Mondays, 6:30, Fremont High School; Thursdays, 6:30, John Muir Jr. High School.

BIBLE STUDY, Roy Stahl
Meet daily, Plant I, east mezzanine conference room, 11:15 a.m.; Plant II, M.W.F. 12:00 conference room M1-B1, T.Th. 12:30 conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Wayne Chamberlin

BOWLING (nights), Garland Steiner
Christmas Tournament Dec. 27-30.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m. Next—January 10.

CAMERA CLUB (days), Robert Carberry
Meet 1st & 3rd Friday evening, 7:30 p.m. Next—January 6.

CAMERA CLUB (nights), Gene Beck
Meet 1st & 3rd Saturday, 7:30 p.m. Next—January 7.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next—January 25.

GOLF, Andy Titus

GOLF (nights), Leo Baker
Christmas Tournament, Western Ave. Golf Course, December 28 and 29.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—January 17.

MIXED CHORUS, Florence Graveline
Meet every Wednesday evening, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m. Next—January 16.

MODEL RAILROAD CLUB, John Felder
Meet every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays. Next—January 9.

RADIO CLUB,
Meet 3rd Tuesday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m. Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—December 24.

SKI CLUB, Howard Fletcher
Meet 3rd Thursday of month.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays. Next—January 8.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Next—January 24.

EXCLUSIVELY FOR THE LADIES

BASKETBALL, Pam Srader
Practice sessions Alondra Park Gym, Tuesday evenings.

BOWLING (days), Lee Hopkins.
Christmas Tournament December 27-28-29-30, 20th Century Bowl.

DINNER CLUB, Hazel Stewart
Monthly dinner meetings.

INTERIOR DECORATION
Weekly meetings in lampshade making every Thursday evening, 7:30 p.m.

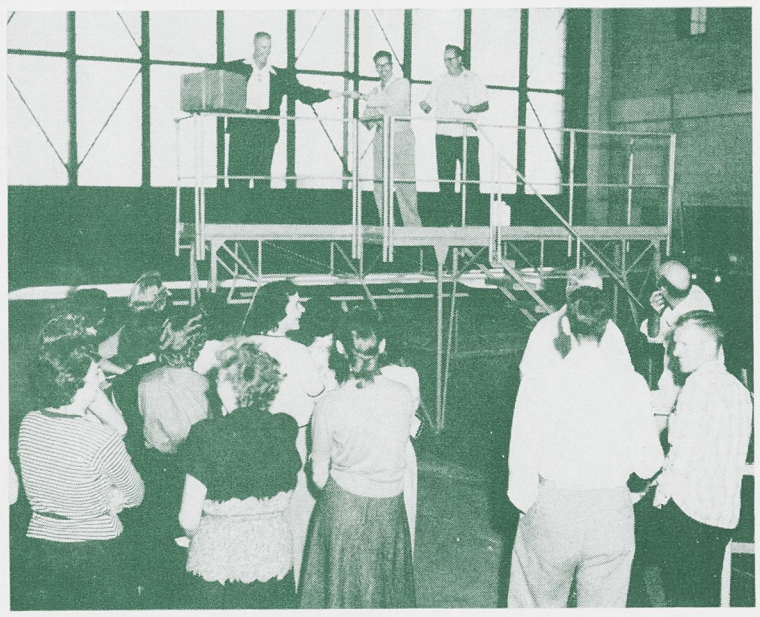
SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet Tuesdays, 7:00 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Vi Murphy
Meet first and third Thursdays, 7:30 p.m.

SPORTS

The Northrop News

HOLIDAY PLANS FOR NRC



MTF HOLIDAY AWARDS—. Pictured above are Florida MTF Norcrafters during Thanksgiving turkey drawing. Shown making awards are, from left: Verle Smith, chief, MTF; Jack Cushman, Florida Industrial Relation; George Miller, Florida NRC vice-president. Employee clock numbers were drawn for 15 wins.

Little Girl's Heaven

NRC TOYLAND—Pre-Christmas prevue of the 108 dolls dressed by Ontario Norcrafters is given Santa (really LaVerne Banks, Empennage Assembly and Installation, Ontario) by Ontario NRC members Patty Waldo and Ruth Harrell. Winners and prizes in doll dressing contest will be announced at Ontario NRC Christmas dance on December 23 at Pomona Golf and Country Club. Dolls to be given to needy in area.

NRC Mariners Training For Coming Adventure

A 70-mile canoe trip down the swift Colorado River is the next major project on the agenda for the busy members of the NRC Mariner Ship "Sea Maid."

The teen-age girls—14 in all—and two adults (Sea Maid leader May Hawkins and First Mate Dorothy Allison) are now in the midst of an extensive 15-hour Red Cross canoeing course which involves the proper techniques for handling and packing the fragile vessel.

The girls previously completed Red Cross swimming and life saving courses. Beginning sometime after the first of the year the Mariners will receive primitive camping training under the direction of Dorothy Allison.

The five-day trip, which is scheduled for the Easter vacation in the Spring, will start at Blythe and follow the Colorado River to Martinez—near Yuma, Arizona. Trucks will carry the girls and their gear to Blythe and be on hand to pick them up at their journey's end for the drive home.

The NRC Mariners (Senior Girl Scout Troop) meet every Tuesday at 7:00 p.m. in the Scout Cabin, 135 Grevillea, Hawthorne. May Hawkins, Mariner representative, announced that the troop is at present in need of leadership help to assist in the extensive program of social and outdoor activities. Any ladies interested in assisting with the activities of the troop are invited to contact May through the Personnel Activities office, extension 2784.

CLUBS CHANGE MEETING DATES

The approaching holiday season has necessitated several changes in the NRC schedule of meeting dates.

In accordance with the "no-work" philosophy for Norcrafters during the holidays, the NRC Clubhouse will be closed during the Christmas vacation week and the NRC clubs which would normally meet during this period have changed their meeting dates as follows:

Bridge Club, next meeting January 10; day shift Camera Club, January 6; night shift Camera Club, January 7; Gem and Mineral Club, January 25; night shift Gun Club, January 17.

The next Model Airplane Club meet will be on January 16; Philatelic Club, January 9; Square Dance Club, January 8; and Tropical Fish Club, January 24.

Those clubs not mentioned above will meet in accordance with information contained in the NRC Good Time Table, this page.

During the holiday week the NRC Bowling leagues will hold the third annual Christmas Bowling Tournament at the 20th Century Bowl, 5721 South Western Avenue. The tourney begins December 27 to continue through December 30. The myriad details of the event are under the direction of Bowling Tournament Committee members Rice, Gwin, Vierling, J. Ward, Thompson, Elder, Donnici, Chamberlain, Bortner, Mundsen, Gunderson, Fitzgerald, Walter, Hruska, Lang, Wirthman, and C. Ward.

On Wednesday, December 28 and Thursday, December 29, NRC golfers will gather at the Western Avenue Golf Club, 12009 South Western Avenue to compete in the first annual NRC Christmas Golf Tournament.

NRC awards will be given winners in both tournaments.

Merry Christmas and a Happy New Year

HAL HUNSBERGER

NRC President

And All Members

of the

NRC COUNCIL

SLIM 'N TRIM NEW PALMDALE CLUB FEATURE

Of timely interest to Palmdale lady Norcrafters and wives of Norcrafters — especially those who bear physical witness to the fact that they have partaken heavily of holiday turkey and all the trimmings — is the newly organized Palmdale NRC Slim 'n Trim club.

The first meeting of the group will be on January 4, 1956, according to word received from Slim 'n Trim Commissioner Lee Bean. Meetings will be held at 7:00 p.m. in the Palmdale NRC Clubhouse.

Instructor for the courses will be Mable Hart, Physical Education instructor at Antelope Valley High School. Classes are free and all ladies are invited to attend.

PRE-SEASON SHOWING!—Members of the NRC Toastmistress club and guests gathered recently at the Southern California Gas Company auditorium to view a pre-holiday season showing of fashions. Models were Norcrafters. Pictured, foreground, left: Mary Polliard, Alice Slawinski, model Pat Combs, (daughter of Midge Combs) Olga Cross, Claire Stemp.

THE Northrop Scene BY DAY AND NIGHT

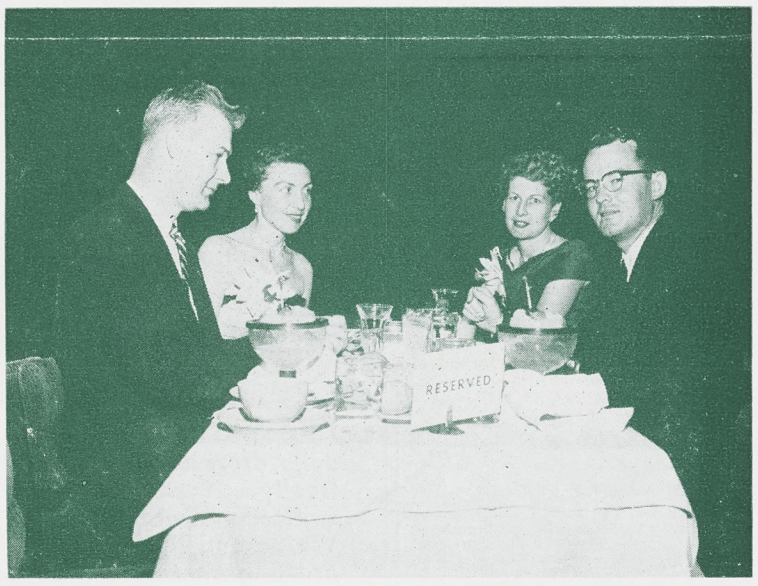
Fun at All-Plants Private Party

THIRD ANNUAL Private Party—. Norcrafters and guests pause during NRC Palladium Private Party to listen to songs by fellow Norcrafter Eddie Johnson, Maintenance. The huge ballroom was reserved for the evening for Norcrafters only and in addition to dining and dancing, guests saw top entertainment acts.

WAS IT SANTA CLAUS?—Pictured during one of special events, from left: Ernie Boren, NRC parliamentarian; Hal Hunsberger, NRC president; Sterling Way, managing director, Hollywood Palladium; Harry Clark, general supervisor, Charles Boyle, manager, Personnel Activities and Services Administration.

MAESTRO and friends—John B. Clark, director, Industrial Relations, left; and Northrop vice-president, Administration, Robert R. Miller, right, chat with band leader Russ Morgan at party . . .

NRC Past President Joe Carver, left, and wife Pat are pictured with NRC Council Parliamentarian Ernie Boren, right, and wife Oletta during dinner at annual Private Party.



AND THEY DANCED, danced, danced—. Pictured are some of Norcrafters and their guests who danced to music of Russ Morgan at highly successful third annual NRC Palladium Private Party at Hollywood Palladium on December 3. Additional entertainment featured the Signatures, singing and playing combo.

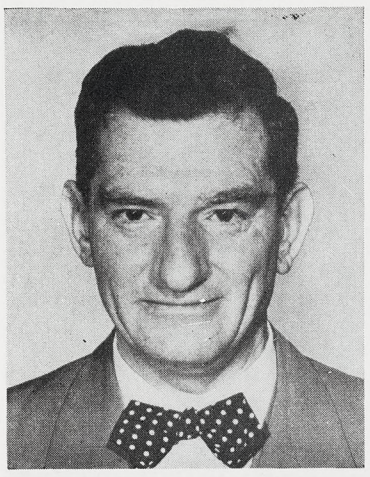
PLASTIC SHOP supervision was in full force at party. Seated at this table: Lolita and Bud Atkins; Bonnie and Art Prescott; Walt and Florence Sadesky; Loyal and Margaret Massey; Frank and Dorothy Zahller; and George and Mary Ellen Babajian. Numerous departments arranged group reservations for the night.

Northrop News

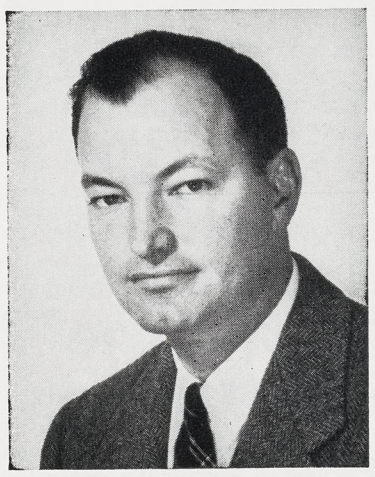
Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, January 18, 1956

High IAS, NACA Posts to Five Northrop Engineers

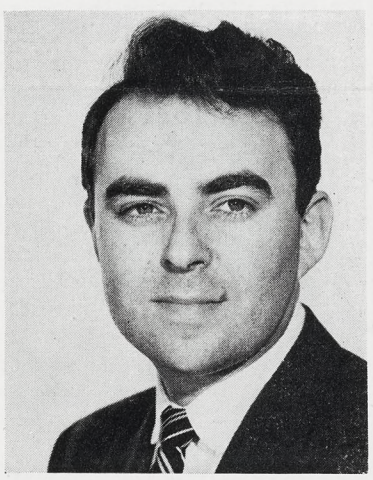
Northrop Engineering representatives will play prominent roles in Institute of Aeronautical Sciences and National Advisory Committee for Aeronautics activities this year, release of appointments and election results indicates.



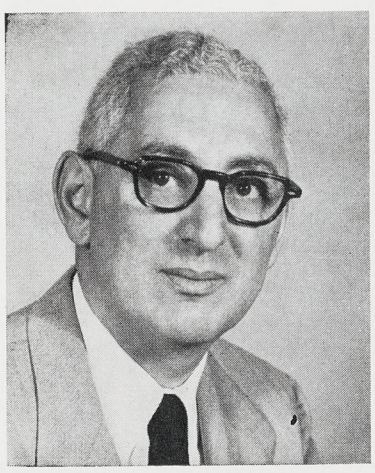
EDGAR SCHMUED



W. F. BALLHAUS



R. B. KATKOV



GEORGE MANGURIAN

RALPH DAVIDSON

Edgar Schmued, vice-president in charge of Engineering, has been elected one of four vice-presidents of the IAS for 1956, and will take office during the annual meeting of the organization in New York at the end of this month.

New president of IAS, succeeding Robert E. Gross, Lockheed president, is Dr. Edward R. Sharp, director of the Lewis Flight Propulsion Laboratory of the NACA.

The NACA appointments went to Chief Engineer Dr. William F. Ballhaus; R. B. Katkov, chief of Fluid Dynamics; George Mangurian, chief of Structures; and Ralph Davidson, assistant chief, Structures.

Ballhaus was named to the Committee on Aircraft Construction; Katkov to the Subcommittee on Aerodynamic Stability and Control; Mangurian to the Subcommittee on Aircraft Structures; and Davidson to the Subcommittee on Aircraft Loads.

Dr. Ballhaus, Mangurian, and Davidson were re-appointed to committees on which they served last year; Katkov's is a new appointment. Announcement was made by Dr. James C. Hunsaker, chairman of NACA.

Engineers At Eastern Meetings

On the heels of the announcement of IAS and NACA (above) news was released of activities of Northrop engineers in other fields.

At the International Conference on Fatigue in Flight Structures, to be held on January 31 at Columbia University, P. D. Brooks, supervisor of Structures Research, will deliver a paper entitled "Structural Fatigue Research and Its Relation to Design".

Shortly before that event—on January 18-20—Northrop engineers will participate in a symposium on high speed aerodynamics and structures being held in Buffalo under the joint sponsorship of the Air Research and Development Command; Bell Aircraft; Cornell Aeronautical Lab; and the University of Buffalo.

Two papers prepared by Northrop engineers will be presented at the symposium on the general subject of supersonic missile wings subjected to elevated temperatures.

One, a study on structural design and its relation to the subject, has been prepared by James E. Crawford, chief of Airframe and Mechanical Design, and John T. Bennett, Airframe Design group engineer, with the former scheduled to present the paper.

The second treatise, dealing with a strength investigation study of the same subject, is the product of George Mangurian, chief of Structures, and C. R. Smith, Project Structures engineer. Smith will present the paper; Mangurian is slated to chairman one of the sessions at the symposium.

W.C. Collins Presented High Award

Golden Scissors for distinguished achievement in aviation have been awarded Northrop President Whitley C. Collins by the California Fashion Creators, it has been announced.

The Golden Scissors, one of four such honors, were presented at the Ambassador hotel last week. The Collins award was for the greatest contribution in the aircraft industry toward the growth and development of California during 1955.

Other similar awards went to A. Quincy Jones and Frederick E. Emmons for building and architectural industry; Dore Schary, motion picture industry; and Danny Thomas, television and radio industry.

GMW

(See Page 5)

ARMY HEADS VISIT

UNDER SECRETARY FINUCANE, ARMY ORDNANCE OFFICIALS DISCUSS NORTHROP PROJECTS

Distinguished representatives of the U. S. Army, headed by Under Secretary Charles C. Finucane, last week visited the Hawthorne plant, where they viewed a product display prepared for their scrutiny in Plant Four, and heard descriptions of various Northrop projects under way at Hawthorne, Anaheim, and Radioplane.

In addition to Secretary Finucane, the party of guests included William H. Martin, Director of Research and Development, Department of the Army; Lieutenant General J. M. Gavin, Chief, Research and Development, Office Chief of Staff, U. S. Army; Major General E. L. Cummings, Chief of Ordnance, Department of the Army; Brigadier General William L. Bell, jr., commander, White Sands Proving Ground; Lieutenant Colonel Stanley P. Hidalgo, military assistant to the Secretary; Lieutenant Colonel W. F. Lahatte, executive assistant to the director, R & D; and Lieutenant Colonel M. R. Collins, Office Chief of Ordnance, Washington.

Los Angeles Ordnance District officials, including Colonel J. E. Johnston, chief; Major R. T. George; and Dr. Humbert Morris, accompanied the group from this area.

The display, and accompanying discussions by Northrop representatives, highlighted a variety of diversified products and the ability of the Northrop-Radioplane-Anaheim team to produce them.

Engineering division personnel described five highly classified Hawthorne projects to the visitors. Vice-president Edgar Schmued, Chief Engineer William F. Ballhaus, Chief of Preliminary Design Welko Gasich, and Chief Analytical Engineer R. P. Jackson delivered the talks.

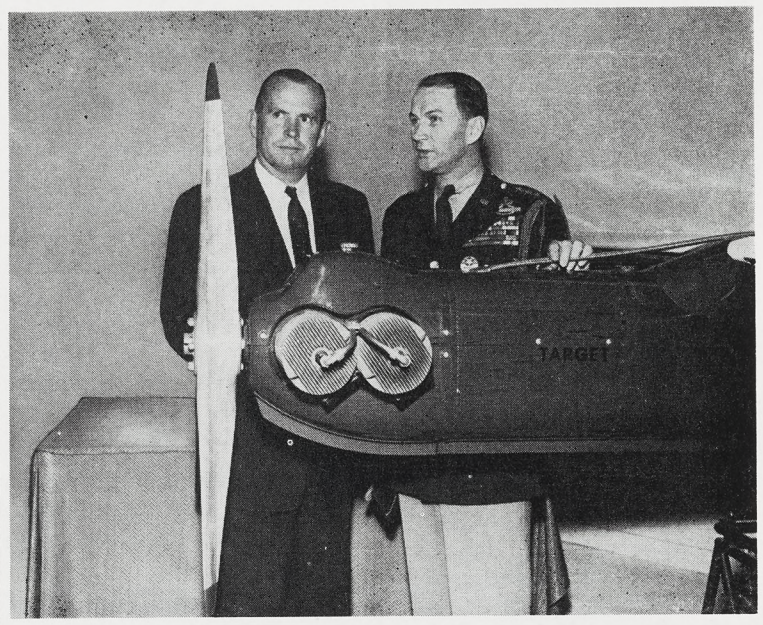
Radioplane projects, including the OQ-19, RP-71, Q-4, and 2013 were discussed by A. W. Callam, assistant vice-president of Military Relations, and S. E. "El" Weaver, vice-president of Radioplane Engineering.

R. R. "Dick" Nolan, manager of the Anaheim Division—which has had particularly close relations with Army Ordnance—briefed the group on Anaheim's engineering and production capabilities, both present and projected.

The visiting group, as well as Northrop and Radioplane representatives, were guests Thursday evening at a dinner meeting sponsored jointly by the American Ordnance Association and the Los Angeles Chamber of Commerce.

Army Under Secretary Sees Product Display

DISTINGUISHED VISITORS—. U. S. Army representatives, headed by Under Secretary Charles C. Finucane, last week viewed product displays of Northrop, Radioplane and Anaheim. Here, W. F. Ballhaus, chief, Northrop Engineering, discusses company design concepts with Fred Stevens, chief, Northrop Guidance and Controls; Under Secretary Finucane; Robert R. Miller, vice-president, Administration.



RADIOPLANE target aircraft—. Lieutenant General J. M. Gavin, chief, Research and Development, Office Chief of Staff, U. S. Army, reviews Radioplane products with M. W. Tuttle, Radioplane vice-president. At conclusion of the visit, Northrop and Army officials were hosted at dinner meet by American Ordnance Association, Los Angeles Chamber of Commerce.

Eye Protection Program Introduces "Wise Owls"

Coincident with a plant-wide announcement designating many production areas as 100 per cent eye protection areas, Norcrafters became eligible for enrollment in the Wise Owl Club of America, Chief Safety Engineer Lee Johnson revealed.

The club gained two Northrop members immediately when safety glasses saved the sight of Arthur Gollwitzer, Sheet Metal night shift Norcrafter, and Donald Clarke, Machine Shop. Both will receive gold-filled lapel pins, shop badges, and lifetime enrollment certificates testifying to their standing as "Wise Owls".

Gollwitzer, who had had his glasses for only a week, escaped blindness in his right eye when a drill bit broke, and the broken piece flashed the length of a bench to hit the right lens. The glass cracked, but there was no injury to Gollwitzer's eye.

A broken mill cutter threatened Clarke's sight, but here again the glasses provided the necessary margin of safety, and earned Clarke his Wise Owl membership.

The Wise Owl Club of America was organized for the protection of vision in industry under the sponsorship of the National Society for the Prevention of Blindness. Charters, such as that granted to Northrop, are held by leading industries throughout the country.

The organization reported in November that it had already enrolled 8000 thankful members throughout industry.

Under the 100 per cent eye protection program, certain parts of the shops have been posted as areas in which it is mandatory to wear safety glasses. These are available free at any tool crib.

Arrangements have been made for purchase at reasonable prices of prescription safety glasses for Norcrafters ordinarily wearing glasses. The regulations prescribe that either safety prescription glasses be worn in the marked areas, or that goggles, face shields, or clip-on lenses be worn over non-safety prescription glasses. (The Safety department has full details regarding purchase of safety prescription glasses.)

Sub-Contract Relations Department Established

Establishment of a Sub-Contract Relations department at Northrop has been announced by John R. Alison, vice-president in charge of Customer Relations.

Russ Bowditch, 15-year Norcrafter, will head the new department as manager, reporting directly to Lee H. Smith, Northrop director of Military Relations and Customer Field Service.

The new department will be responsible for development of new sub-contract and second source programs at Northrop. Alison said.

Northrop has sub-contracts with McDonnell Aircraft Corp., Lockheed Aircraft Corp., and several other major aircraft companies, in addition to its extensive prime contracts with the U. S. Air Force and other U. S. government agencies.

For the past three years Bowditch has been general supervisor for proposals and negotiations in Northrop's Contract Administration department.

MANAGEMENT CLUB NOMINATIONS AT NEXT MEETING ON FEBRUARY 4

Nominations are now in order for 1956 offices of the Northrop Management Club.

The annual nomination dinner meeting, which serves to pose candidates for M-C office—president, vice-president, treasurer secretary, and sergeant-at-arms—will be held Saturday night, February 4, at the Rodger Young Auditorium, it has been announced by President Scotty Smith.

Speaker for the evening will be Northrop Vice-president and treasurer, Roland J. Pagen. Question blanks, by which membership may ask Company "state of affairs" questions of the speaker, have already gone out. Questions are to be returned to Maxine Lonsdale, club secretary, Department 4100, Zone 22.

President Smith promises an array of fine door prizes. There will also be an attendance prize of 25 silver dollars.

Menu is chicken or fish.

Tickets three dollars.

Cocktail hour is scheduled for 6:00 p.m.—dinner at 7:00 p.m

Ticket application forms have been mailed to all members with early reservations requested.

Appointed

TODD FAST, Public Relations, last week was appointed manager of Community Relations, new post reporting to Al Cline, director of Public Relations . . . Fast, right, member of PR department for five years, is currently president of Hawthorne Rotary Club, recently greeted Rotary International President A. Z. Baker upon latter's arrival in Los Angeles following 'round-the-world tour of Rotary Clubs . . .

Down---Range

Suggestion Award plans are multi-million dollar business, it was pointed out at Suggestion Plans Association monthly meeting at Rodger Young last month. Norcrafters Cecil Callaway, Suggestion Plan head, and Ray Wenger, Material Conservation coordinator, took part in program . . . Callaway showed new Northrop indoctrination film, and Wenger spoke on "Work Simplification and Suggestion Awards".

Norcrafter Karoll Shurtz's son, Sewall, subject of News feature in October, 1954 returned home on leave after medal-winning performance in world fencing championships held in Rome recently . . . Now in Navy. Sewall is former Norcrafter . . . became first western male fencer to take national epee championship, and has already been picked for next year's U. S. Olympic fencing squad. . . .

U.S. Needs Engineers--Gen. White

The United States needs more and better engineers and scientists to develop superior weapons for the nation's defense if we are to meet the threat of the U.S.S.R., according to Gen. Thomas D. White, Air Force Vice Chief of Staff.

The Soviet Union, General White warned in a recent nationwide address, has come from a period in which most of the population was illiterate to a point where their present output of scientists and engineers exceeds that of the United States, and they are now showing signs of technological maturity.

Even though many of their spectacular successes have been the results of duplicating basic equipment taken from the Free World nations, the Soviets have accomplished many things that our experts said they could not do. Even more surprising, some of the things the Russians were supposedly unable to do at all, they not only did, but did in a hurry.

As examples of this, General White cited:

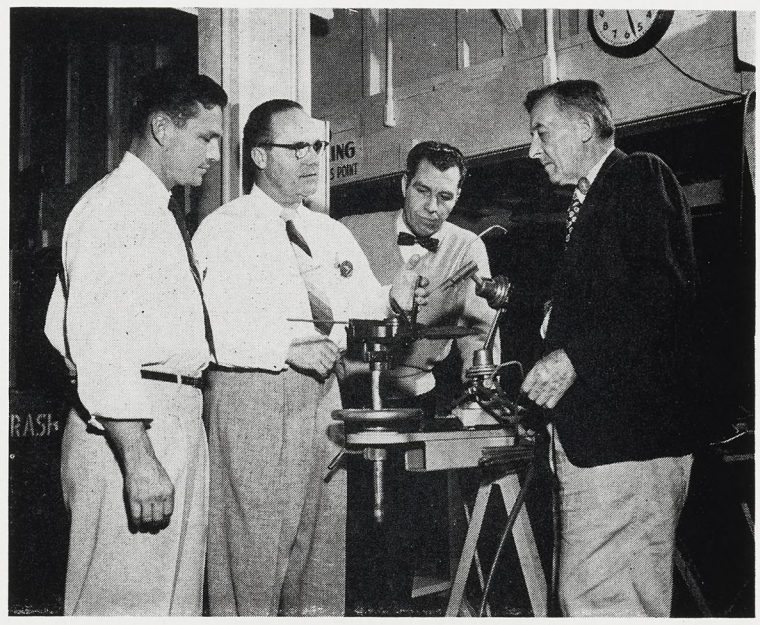
The B-29—It was thought in this country that it would take the Reds six or seven years to duplicate it. *It took them two.*

The jet engine — It was estimated it would be difficult to make a good copy of a British jet engine. *Russia produced a better version of this engine in less than a year.*

The atom bomb — American experts predicted that it would take from six to ten years to produce a similar bomb, if they were able to produce it at all. *The Soviets rocked the world with a nuclear explosion in about three years.*

America's answer to this growing Red threat lies in "Power for Peace", he said, and this power lies in having forces in being and in developing superior weapons systems which will keep the United States ahead of the enemy.

Duplicating Tube Bender Joins Tool Achievements



TIME-SAVING tube bender developed by Ed de Voss, second from left, is in daily use in Hydraulics and Plumbing. Discussing device: Bob Hancock, foreman, 5517; de Voss; John Dew, wing line department head; and Toolmaker Herb Lowe, who helped make it.

Recent addition to an already long list of ingenious Northrop tooling developments was the duplicating tube bending device perfected by Standard Tooling Norcrafter Ed de Voss, of "Million Dollar Idea" fame (see Northrop News, October 22, 1952).

Wide potential use of the device is indicated by the fact that ten companies and two Air Force bases have already expressed a desire to obtain one! One request for information has come from Sweden!

John Oliver, Associated Products, has reported that licensing arrangements are being made now for manufacture of the tube bender under terms of the Northrop Patent Award plan.

Multiple bending of tubes for use in the Scorpion can be accomplished four times as rapidly as with former methods, while maintaining necessary accuracy. The original device is in daily use in Hydraulics and Plumbing (5517).

De Voss' tube bender can be set up quickly by even an inexperienced man to duplicate any bend from a template, utilizing three ball and socket units to achieve the required flexibility.

Every Scorpion has close to 1300 tubes, totaling almost a mile in length. About half is one-quarter inch thin-walled tubing, on which de Voss' development is primarily used.

Made of stainless steel or aluminum, tubing in the F-89 performs several vital functions — carrying fuel, delivering hydraulic pressure, acting as main lines for de-icing units, and supplying oxygen to flight personnel, to mention a few. Some have to withstand pressure up to 3000 psi.

A great deal of manual set-up operation has often been necessary in the bending of tubes to required shapes. Automatic equipment is available, of course, but releases are not large enough to justify set-up time for its use on the small (one-quarter inch) lines.

The degree of bend is set on the device quickly by using the template, which is made of rod the same diameter as the tubing to be bent. With adjustment made to compensate for the natural spring-back that results from bending, the degree is established, and all tubes needing that bend can be run through. After all parts have had this first bend made, the template is again used to make the setting for the next, and all following bends, with the full release going through for each bend.

Pneumatic pressure, applied or released by foot pedal, controls the ball and socket joints in their holding operations.

Simplicity and small size of the attachment make the bender a "natural' for field operations, as well as for those in the factory.

A tool development engineer, de Voss became widely known to Norcrafters as the result of a suggested change in fabricating hot air duct connectors in 1952, from machining heavy stock to punch press use of strip steel. Use of the connectors in Scorpions was great enough to boost material and time savings to the million-dollar mark.

Toolmaker Herb Lowe gave Ed a substantial assist in the making of the tube bender; encouragement and suggestions came also from Bob Hancock, Department 5517 foreman, and John Dew, former 5517 foreman and now department head of the wing line (Departments 5584 and 5585).

Northrop News

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JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

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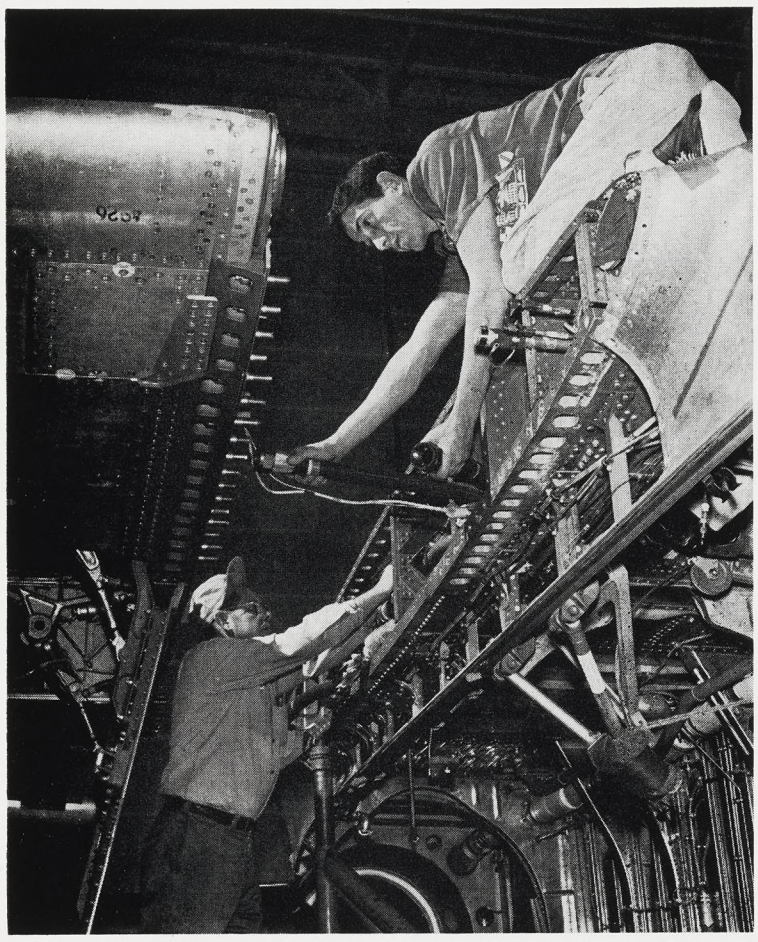
Palmdale Section



On Final Line

WING ATTACHMENT — C. E. Bruner, hydraulic check-out man, left, and T. L. Mooney, aircraft structure installation man, ready for wing attachment at assembly station one, as Palmdale Norcrafters move Scorpion H-Series airplanes down final assembly lines.

AS SCORPION MOVES down line, it gains the twin Allison engines that boost it through the skies. Here, in photographically artistic shot taken through intake, Palmdale Leadman C. L. LaMonte prepares a right-hand bay for engine installation. Soon after completion of his duties the powerful engine will be rolled into place, and another F-89 is closer to completion.

To Insure the Future Buy Bonds Today

Via Payroll Deduction

REFERRAL PROGRAM

$100 CASH AWARDS FOR REFERRING ENGINEERS

One hundred dollar cash incentive awards are awaiting Norcrafters who successfully refer specified personnel to Northrop employment.

The newest Employment Referral Plan lists 52 job classifications in which there are openings (complete list below). The plan is open to all personnel not directly associated with the hiring program. It is similar to previous programs which enlisted the noted Norcrafter spirit of cooperation to procure needed skills for the Engineering-Manufacturing team effort.

Announcement of the plan just prior to the holidays brought an instant, enthusiastic response from Norcrafters. An initial supply of 2000 referral cards was exhausted within the first day. Additional cards are available either from the Personnel office in Plant One or from Engineering Industrial Relations in Plant Three.

Under terms of the plan the Norcrafter can refer applicants by providing them with referral cards on which he has indicated his name, department, man-number, and date. The applicant presents this card at either the Personnel department or Engineering Industrial Relations.

Ninety days after a referred applicant is hired Industrial Relations will instruct Finance to make the $100 payment to the Norcrafter responsible for the referral, as indicated by the card.

Individuals hired under the provisions of the program must be hired as permanent, full-time personnel. The referral qualifies for payment only if a referral card was produced at the time of hire, and after the referred individual has been on the active payroll for at least 90 days.

JOB OPENINGS IN REFERRAL PLAN LISTED

Listed below are the Northrop job classifications which currently qualify under the provisions of the foregoing Referral Award Program:

- Aerodynamicist B
- Aerodynamicist A
- Aerodynamicist Engineer
- Assistant Engineer
- Computer Development Engineer
- Computer Operator A
- Computer Operator B
- Computer Research Engineer
- Computing Analyst A
- Computing Analyst B
- Computing Analyst C
- Computing Equipment Specialist
- Computing Specialist A
- Design Specialist
- Design Weight Engineer
- Development Liaison Engineer
- Engineer Project Coordinator A
- Dynamicist A
- Dynamicist B
- Dynamics Engineer
- Designer A
- Designer B
- Engineering Drawings Checker A
- Engineering Liaison Man A
- Engineering Representative A
- Engineering Staff Assistant A
- Flight Test Analyst A
- Flight Test Engineer A
- Instrumentation Engineer A
- Materials Review Engineer
- Missile Test Engineer
- Preliminary Designer A
- Preliminary Design Engineer
- Process Analyst A
- Process Engineer
- Production Design Engineer A
- Production Design Engineer B
- Research Engineer A
- Research Analyst A
- Senior Test Equipment Engineer A
- Staff Engineer A
- Standards Analyst A
- Standards Engineer A
- Stress Analyst A
- Stress Engineer A
- Structures Engineer A
- Test Equipment Engineer A
- Thermodynamicist A
- Thermodynamics Analyst A
- Thermodynamics Engineer A
- Weight Control Engineer A
- Wind Tunnel Test Engineer A

Major Med Coverage For Dependents — No Exam

Major medical coverage for dependents is being offered to Norcrafters for a limited time without physical examination, the Group Insurance section has announced.

Enrollment in the plan—which costs only 51 cents per week, no matter how many dependents—is open until February 17.

Personnel may use the form reproduced below, filling in the details requested and sending the completed form to Group Insurance section, Department 4220, Zone 22. Additional forms are available from the Group Insurance section, Plant One, or from department clerks.

The coverage will take effect on February 20, provided that at least 1000 new enrollments are received by the 17th.

There are only two limiting conditions to the offer.

The first: — dependents who have been previously examined and denied coverage are not eligible.

Second limitation applies to dependents with a disabling condition of illness or injury existent at any time during the 31-day period preceding February 20, 1956. Coverage for these dependents will not become effective until 31 consecutive days elapse after date of full recovery.

(The policy definition of disability can be found on page two of the insurance certificates issued in December, under the heading "Deferment of a Dependent's Insurance").

Norcrafters who have inquiries regarding their dependents' particular status may obtain full information from the Group Insurance office, Extension 2586.

In less than a year of existence, the major medical program for dependent coverage alone has paid out well over $100,000 to Norcrafters, Group Insurance figures show.

Norcrafters themselves are insured in the plan at no cost to themselves, and have materially benefited from major medical coverage, as many of them can testify.

DEPENDENT major medical coverage is open until February 17. Norcrafters can enroll dependents by using handy form below, filling in information requested; clipping the form; and mailing completed form to Group Insurance, Dept. 4220, Zone 22. Additional cards available in Group Insurance, Engineering Industrial Relations, or from department clerks.

NORTHROP AIRCRAFT, INC.

DEPENDENTS GROUP MAJOR MEDICAL EXPENSE INSURANCE ENROLLMENT CARD

NAME (PLEASE PRINT ALL ANSWERS) — LAST NAME / FIRST NAME / MIDDLE INITIAL	MALE	FEMALE	DEPT. & SHIFT	CLOCK

NAMES OF ELIGIBLE DEPENDENTS	RELATIONSHIP	DATE OF BIRTH

I hereby authorize NORTHROP AIRCRAFT, INC. to deduct from my salary, from time to time until further notice, amounts equal to the contributions required of me towards the premiums for Dependents Major Medical Expense Insurance under policies issued to my said Employer by The Prudential Insurance Company of America, the initial deduction to be .51¢ per week.

Date.....19..... SIGNATURE OF EMPLOYEE .....
(Sign Full Name)

EFFECTIVE DATE

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial **enterprises and private businesses are not accepted.**

Deadline — **Wednesday noon** one week before publication.

FOR SALE

BEDROOM SUITE, 5 piece, vanity, bench, 2 twin size beds, footboards, chest of drawers, walnut finish, springs, mattresses, lamps included, $50. R. D. MILES, PL 3-9847. A

ELECTRIC RANGE, 1954, 30", deluxe features, fine condition, $165. HENRY R. GLOOR, LAmbert 5-0416. A

LIVING ROOM SUITE, upholstered wool frieze, hunter's green, clean, firm, $50. CHAMPION, FR. 4-5394. A

CUSHMAN SCOOTER, good condition, $65. J. B. BAILIFF. OS. 5-5031. A

TV, 16", mahogany console, good condition, $50. B. P. BRADY, DA 9-5646. A

AERONCA CHIEF, 1946, needs some fabric work. $450. OS 5-3694, after 5:00 p.m. A

HOUSE TRAILER, 26', Alma Tandem, eastern made, 1950 model, $1495. PAUL RISENER. Write to Northrop News, Box 1024. A

MOTORS, ¼ hp. electric, have 4, $5 each, very good running order, $4 each if bought together. M. KRAVETS. TO 9-8937. A

MOVIE CAMERA. Keystone 8mm, K22 F2.5 lens, used 6 times, with case, projector available. $45. S. W. JOHNSON, PL 4-2504. A

STOVE, O'Keefe & Merritt, with grill, $30; WASHER with pump, $10; POWER MOWER. $20; TYPEWRITER, $25; Victor 16mm MOVIE CAMERA. $55. DENVER HOWARD. OS 5-5829. A

SEWING MACHINE, Singer 202-1 portable, like new, direct drive, built-in motor, $100; TAYLOR TOT, folding type, good condition, $6; SCHICK super dual and wall holder, $6. HAL PARRY. OR 1-9835. A

NAVION. 1947 NAA, const. speed prop., Lear omni., full gyro panel, Southwind heater, new glass, high speed tail mod. reserve tank, $6500, net to owner; 78 rpm RECORD PLAYER and RADIO in chairside cabinet, make offer. J. F. KATENKAMP. FR 7-1296. A

GRAHAM, 1941 4-door sedan, 1953 Plymouth engine, stick shift. $450 or make offer. G. JENNINGS. LO 6-0411, between 10:00 a.m. and 2:00 p.m. A

TRACTOR, chain drive for little boy, good condition, cost $20, $8. MARIE CATALDO. OS 5-5942. A

MG TC. '49, best offer. OR 2-8980. A

ELECTRIC RANGE, Crosley. 3 plate and deep well, clock-controlled, very clean, $30; Dearborn GAS HEATER, 20,000 btu, with Robertshaw thermostat-control, $25. FR 5-5256. A

EARRINGS, handmade blue and pink sequined, matching ribbon-tie necklace, $1; Lebanese enameled hand-beaten silver for pierced ears. $10; Lymans costume earrings, pink and blue stones, $1; hand-crocheted COLLAR, silver thread, rhinestones, pink and white pearls, $6. LOIS McGRAIL, OR 1-4585. A

BEDROOM SET, 6 piece, glass tops, very good condition, modern mahogany, $125; 40" GAS RANGE, good condition, $75. OS 5-6855. A

SPINET PIANO, excellent tone, $1200 value, $350 cash. J. C. HAGGARTY, OS 5-5850. A

HOUSE, 6 rooms, 3 bedrooms, large back yard, fireplace, garage, near Geo. Washington High School. $16,000. ANDREW MNAHONCAK. PL 4-2410. A

BABY BUGGY; BATHINETTE; JUMPER SEAT; SCALES. JOHN R. STERLING, FR 4-8608. A

FORD V8, Super, 4-door sedan, $200; SEWING MACHINE, White, treadle, long shuttle, sews good. $12.50. PL 5-2412. A

FORD, model A, 1931, $95. I. C. STOTESBURY. FR 4-6076. A

SILVERWARE, quadruple plated, Gothic pattern, service for 8, used very little; man's beige wool covert cloth TOPCOAT, size 38 reg., best offers. FR 5-9885, after 5 p.m. A

WASHING MACHINE. ABC-omatic good condition. $50; baby's BASSINETTE, $5. BOB NELSON, DA 9-3702. A

LAUNDRY TRAY, double, cement, good condition, $4. A. E. OLSON, NE 1-1341. A

FORD, '32 tudor sedan. '40 Mercury engine. Evans heads, two jug manifold, $175. Write to Northrop News, Box 1020. A

RANGE, Gaffers & Sattler, 6 burners, large oven, good condition. $70; WASHER, Universal, wringer type with pump, $15; STUDEBAKER, 1937 coupe with rumble seat, $49. OR 2-3902. A

PORTABLE TYPEWRITER, Corona reconditioned. DOROTHY W. POE, OR 2-4774.

FORD, 1949 coupe, new tires, brakes, battery. $350. DA 3-0634, evenings. A

STUDEBAKER, 1948 Champion convertible, $200. OS 5-1847, after 5 p.m. A

GARBAGE DISPOSAL AND DISHMASTER, Electro Way, used less than 4 months, new $289, bargain for cash, or can be financed. A. E. REDMAN. OS 5-7831. A

GAS RANGE, Magic Chef, good condition, $50; baby laundry Kenmore WASHER, used little, $15. JOHN BOLL. OS 5-2572. A

WASHING MACHINE, Kenmore, with suds saver, fully automatic, $50. ROBERT L. HODSON, CA 1-1386. A

BOYS' BICYCLES, 20" and 24", $15 each. R. W. FEENY, EA 2-0646. A

DEEP FREEZE, 21½ cu. ft., chest type, storage compartment attached, only 2 years old. Write to Northrop News, Box 1018. A

HOUSE, frame, and lot, 3 bedrooms, double garage, lot 50'x140', Compton, some furniture in house, $10,500; AIRPLANE, Stinson Voyager, seats 4, recently overhauled, new motor, 273 hours, $2500. HANK SOLAK, NE 1-4122. A

HOME, Westchester, 3 bedrooms, fireplace, recently redecorated, fenced yard, near schools, shopping center, transportation, includes drapes and curtains, $15,450 full price; REFRIGERATOR, Cold Spot, 10½ cu. ft., $55. STANLEY R. MURNANE, OR 2-2634. A

POKER TABLE, seats 8, like new, $30; UMBRELLA TENT, 9x12 ft., complete, $30; 8 FOLDING CHAIRS, leather cushions, $25. E. E. JONES, OR 2-2508, 10 a.m. to 3 p.m. A

HUDSON, 1951 Hornet, 4 door, will arrange financing, $495. F. M. EPPS, OS 6-3970. A

NASH, 1946 "600" 2-door, will sell cheap; Dormeyer FOOD MIXER, in carton, $20. OS 5-6209. A

HOUSE, 1 year old, 3 bedrooms, 1¾ bath, patio, water softener, forced air heat, built-in range, view, Torrance, $15,900, payments $83. G.I. loan, balance $13,400, $2500 down and take over loan; CEDAR CHEST, $25; BOOKCASES, 3 shelf provincial, $8; 4 shelf utility, $2; OCCASIONAL COUCH, black, 2 months old, modern, $28; REFRIGERATOR, 8 cu. ft., gas $65; 1951 NASH Statesman, 2-door, $275. Call DA 6-7990 or FR 2-8710. A

BUICK, 1953 Special 4-door sedan, Dynaflow, $1195. J. L. WALLING, DA 9-3669. A

GLADIRON, Thor, portable ironer, excellent condition, $30. IRVING SHERLOCK. EX 8-4032. A

STUDEBAKER CHAMPION, 1948 2-door sedan, $195. W. F. WAGNER. VE 8-4512. A

TV, 16" G.E., in good condition, mahogany cabinet. $38. DA 4-8177. A

FORD, 1946 pickup truck, ½ ton, $250. RAY GRISH. FR 2-4673. A

CHEVROLET, going in service, must sell, 1953 Bel Air 2-door, $1120, approx. RICHARD I. JENISON, JR., OS 6-4421. A

TAPE RECORDER, FME 2-speed portable, used one month, cost $140, $99.50. R. W. MILLER. Write to Northrop News, Box 1016. A

CADILLAC ENGINE, 1951, 4" bore, 1955 crank and heads. Herbert roller cam, 4 pot manifold, just rebuilt. RONALD DITTMER, KE 5-9551. A

AUTOMATIC WASHER. Bendix. 1953 model, $50; six year baby's CRIB AND MATTRESS, excellent condition, $15; HIGH CHAIR, $5. GERRY GARTLAND, TE 2-9629. A

MERCURY, 1951 2-door sports coupe, headers, nosed, decked, electric doors, $800. ROY EASLEY, OS 6-5052, after 6:00 p.m. A

REED ORGAN, Peerless-Chicago, case recently refinished, solid oak, all keys and reeds work. $160. R. E. KNOWLES, FR 2-9365. A

REFRIGERATOR, 9 cu. ft., O'Keefe & Merritt, runs good, $45. RUTH WORMAN. OR 7-0576, after 4 p.m. A

TRAILER AWNING, 8'x18', nearly new; hifi AMPLIFIER, Triad HF 10-12" speaker, other accessories. DA 3-2024, before 3 p.m. A

DODGE, 1940 coupe, puncture-proof tubes, 4 extra tires, $75; FLUID GEAR PUMP, with 1/3 hp. electric motor, ½ inch hose connections, $45; PIN BALL MACHINE, electric, with automatic tilt, $35. FR 5-4910. A

AT YOUR CREDIT UNION

AUTOMOBILE LOANS are again in effect. Norcrafters with at least two years of continuous service can finance new car purchases, or re-finance older ones, re-paying by the easy payroll deduction method.

FOR SALE

WASHING MACHINE Easy, 2 yrs. old, $50, or best offer. OR 2-1572. A

RECORD CHANGER V-M 3-speed, model 950 and case with 45 RPM auto. adapter, $20; Servel REFRIGERATOR, 1½ yrs. old, 8½ cu. ft., $180; O'Keefe and Merritt RANGE, 4 yrs. old, $75. D. B. WEILAND. FR 9-5088. A

CEDAR CHEST Lane oak, cost $78, $45; set of GOLF CLUBS and bag, $30; TOWING BAR, $10. OS 5-6440. A

TOOL GRINDER, double hones, wire buffer, never used. $35. WM. ADELMANN, PL 2-5480 after 3 p.m. A

DODGE 1946 4-door. $175. JACK KANE. Write to Northrop News, Box 1011. A

SUITS, three men's all wool, one TOPCOAT, one SPORT COAT, size 37, excellent condition, $10 each; COMBINATION Zenith portable, radio and automatic record player, cost $165, will sell for $35. R. H. SPRINGER. OR 1-0197. A

DeSOTO, 1948 4-door custom. $195. GERALD P. RECTOR, VE 8-6095. A

SUPERCHARGER, Centrifugal, V-belt drive, oil-press. lubricated, water-jacketed, Graham type, $35. BILL ODOM, FR 5-5996. A

BUICK, '40 Super club coupe, nosed, $150, or best offer. GARY STURM, OS 6-8483. A

MERCURY, 1949 convert., new top, electric windows, seat and top, $575. C. G. KREUTZ. PL 7-1122. A

JACKETS, horsehide motorcycle, size 38, $22; gabardine sports, quilted interlining, fur collar, teal, worn twice, size 38, $14. LUCY SIMMONS, TO 3-6678 after 6 p.m. A

WATER SOFTENER, Mar-Matic, used one year, semi-automatic, $100. E. L. McFARLAND. OS 5-6438. A

PONTIAC, 1941, 2-door sedan, reconditioned motor, $50. WALTER CLARK, FR 2-4492. A

IRONER, Thor, $10; electric ROASTER, $5; Lionel TRAIN SET, extra cars, never used. W. E. TOWNSEND, OS 6-3448. A

HILLMAN MINX, 1952, 4-dr. sedan, $519 C. G. McCALL. EX 3-8721. A

PUPPY. Miniature Dachshund, three mos. old, female, pedigreed. HELEN MICHAELS. FR 4-7580. A

STUDEBAKER, 1951 Commander V-8, automatic transmission, $395; HOUSE DOORS with hardware, $3 each. M. G. WILLIAMS. OS 6-7390. A

PLYMOUTH, '47, guarantee on new transmission not yet ended, $225 or best. HENRY CHOW. Write to Northrop News, Box 1009. A

FORD 1950 V-8 coupe, overdrive, body slightly rough but mechanically excellent. $400. JOE BERLOW. DU 5-4835. A

HOUSE, 3 bedroom GI resale, gar. disposal, thermostat, block fence, double gar., $13,900, reasonable down payment, $62.31 mo., price and inter. PHILIA SCHMUCK. Write to Northrop News, Box 1008. A

BICYCLE 26", $6; 2 TRICYCLES, $3 each; INCINERATOR (like new), $10. J. L. HILL, FR 5-5760. A

END TABLES, 2 blonde; DINING TABLE and 4 chairs; Maytag AUTOMATIC WASHER; RCA table model RADIO-PHONOGRAPH. DORINE BENKENDORFER. FR 4-0684. A

PIANO, console, French Provincial, 14 months old, cost $995, sacrifice, $595. EX 5-5242. A

CHEVROLET, 1949, excellent condition, $495. VAL MORLAN. PI 4-6146. A

FORD ROADSTER, 1931, Model "A", '36 V-8 engine with milled heads, cam, flywheel. Zephyr transmission and rear end. Make offer. BOB HUGHES. Write to Northrop News, Box 1001. A

MARINE ENGINE. 45 horsepower Universal. 4-cylinder inboard. Just rebuilt, make offer. ANNE LO MONTE. Write to Northrop News, Box 1007. A

LIVING ROOM SET, 2-piece maple, perfect condition, reasonable. R. C. CLARK Write to Northrop News, Box 1006. A

MAGAZINES, 123 copies of Sams' Photofacts, new condition, $75. J. S. ANDERSON. Write to Northrop News, Box 1005. A

MOTOR SCOOTER, 1952 Cushman Husky, 2 seats, good condition, $125; DINNETTE TABLE, 4 upholstered chairs, $30; DRILL PRESS and motor, $25. EVERETT MORGAN. Write to Northrop News, Box 1003. A

OLDSMOBILE, 1950, '88 Holiday coupe, rebuilt engine and transmission, $450; 1941 CHEVROLET. $75; man's DIAMOND RING ⅓ carat, $300; woman's diamond WATCH, $150; woman's dinner RING, 2⅓ carat star ruby with 10 small diamonds, $700. RICHARD PAJARES. Write to Northrop News, Box 1002. A

PLYMOUTH, 1947 sedan, grooved, decked, twin pipes, complete overhaul, Reasonable. E. C. SWART. FR 2-9472. A

DODGE PICKUP TRUCK, 1953 ½ ton, $850. OS 6-7461. A

DRIVEWAY GATE plywood; WIRE FENCE. TED HERZOG, PL 1-2784. A

DODGE 1940 club coupe, $50. B. E. BRADFORD, OR 2-9206. A

PONTIAC, 1948 eight cylinder two door sedan. $200. MARIE EVERLEY, PL 6-6603. A

REFRIGERATOR Servel (gas), excel. cond., $65. RUTH FOSTER. OR 2-3201. A

TIRE, 1 new Atlas, size 760-15, $25. SHIRLEY FELIX, TO 3-8961. A

FOR SALE

FORD, 1946 2-door sedan, full race, street cam, ⅛" overbore, '48 Merc. engine, reasonable. OR 2-3820. A

DODGE, 1952, new brakes, best offer. P. M. JACKSON. RE 4-6915. A

FORD, 1955 Sunliner convertible, continental kit, wire wheels, power brakes and steering, $1995 cash; Karakul FUR COAT, perfect condition, size 14 short, $15; Glen Plaid SUIT, size 12, short, $7.50; PLAY PEN, $3. BOB, FR 4-2649. A

CHRYSLER, 1951 Windsor deluxe. NICK GANSEMER, OS 6-5592. A

PONTIAC CONVERTIBLE, 1949 8, 1950 engine, new top, $295. OS 5-7414. A

FORD, 1950, 2-door, overdrive, Lifeguard tubes, $585. H. O. CHANCE, OS 6-0782. A

FORD, 1939 coupe, new brake lining and clutch. $50. OR 8-6761. A

HOUSE, 2-bedroom, carpeted, foam rubber paddina, fireplace, paneled living room, garbage disposal, dichondra lawns, Walteria, 5' redwood fence, $3000 will handle. JACK H. CLARK, DA 6-7627. A

GLASS ROD, heavy duty with pulley quide, 10/0 Penn reel, 500 yards line, worth $130, take $65. WALTER BARTHEL. OR 4-4447. A

WARDROBE TRUNK, Hartman, $10; used CARPETING (from 2 9'x12' rugs), KITCHEN UTENSILS, free to purchaser of trunk. C. R. KRUGER. DA 6-1358. A

HOUSE TRAILER, 25', apartment size stove, wrought iron table, completely redecorated, $600, includes redwood planter-fence, awning and poles. J. A. BLACK. Write to Northrop News, Box 1004. A

MERCURY MONTEREY, 1955, 4-door, Mercomatic, at least $500 equity desired, take over payments, $94 per month for 20 months. MRS. MILES, CH 9-8854. A

IRON, steam and dry $10; HIGH CHAIR, Cosco, chrome with red plastic, $10. RICHARD LONG OS 6-6637. A

REEL, Penn 49 with line, $18; Gokey snake BOOTS, size 8D, $21.50; officer's carry-all BAG, $5; Kodak Brownie MOVIE CAMERA, $31 with case F1/9 lens; 6 FISHING POLES, $28. JOHN, OS 5-2885 between 10 and 11 a.m. only. A

KAISER, 1948, 4 door, best offer. F. REFALO. DA 9-1077, after 6 p.m. A

CHEVROLET, 1950, Deluxe Styline, 2-dr. sedan, $425. A. D. FANCON, CR 6-3930. A

CAMPING TRAILER, custom built, stove, water tank, spare tire, $185, PL 8-7750. A

DINETTE SET, four piece chrome, Virtue Bros., red, $35; T.V. ROCKER, coral, $20. FR 2-8710, after 7 p.m. A

DeSOTO, 1950, custom coupe, automatic transmission, $450; ELECTRIC ROTISSERIE., Broil Quick. Automatic timer. Like new, $14. T. CANTOR. FR 9-8757. A

WARDROBE CLOSET, good condition hanging space, shelf and bottom storage, simulated wood exterior. 5' high, 2' wide, very reasonable. PL 6-4458, after 6 p.m. A

CHEVROLET, 1951, 4-door. Take over payments plus small down, reasonable. FR 2-7103 A

CAMERA 35mm coupled range finder, f/2 Schneider Xenon lens synchro compur shutter (M-X) 1/500 sec., case, attachments, reasonable offer. R. SEIDLER, OS 6-5491. A

ENCYCLOPEDIA, World Scope, 1954 edition. $25. L. V. NATHAN. WE 4-0635. A

TABLE LAMPS, 3 modern, (2 matched), $2.50 ea.; PET CAGE, $2.50. JIM MINTER. DA 6-4195. A

NYLON ROPE, 400 ft., 7/16" dia., will sell in 200 ft. lengths, $40, full length or $20 for half length. L. W. CHRISTENSEN. OR 2-7624. A

KAISER, 1952, 2-dr. sedan, automatic shift, must sell. $450. OS 6-9479. A

RIFLE, Winchester model 70-375 H & H Magnum, never fired, $100. TERRY RITER, OR 1-9883, evenings or weekends. A

SEWING MACHINE, White portable. Good condition, attachments, $30. RUTH CALCOTE. DA 4-5269. A

MG, 1952, T.D. fiberglass top, $1195. GERRY GARTLAND, TE 2-9629. A

RIFLE, Winchester 30-30 carbine, model #94, practically unused. $50. T. R. DOUDNA, FR 5-7077. A

LAND, 1/10 acres, near Riverside, home site, space for chickens, low down monthly payments. LEO W. DAY. Write to Northrop News, Box 1014. A

GOLF CLUBS, Johnny Palmer, 2 to 9 irons and putter, $20; car HEATER, two sealed beam HEADLIGHTS, $10 for all. SAM VEGA. Write to Northrop News, Box 1027. A

DRAFTING MACHINE, Bruning, 30 inch-plus metal scales. $50. G. R. CLARKE, FR 9-5601. A

RECORD PLAYER, Columbia portable, operates electrically on dry cell; Hamilton Beach commercial MALTED MILK MIXER. EDWARD STRITTMATER, FR 9-4174. A

LAND in Palmdale and Lancaster. MURRAY, TO 7-7172 after 3:45 p.m. A

BUICK, 1955, Super Riviera, power safety group; STUDEBAKER, V-8, 1952 hardtop convertible, auto-trans., best offer over $750; BOOK CASE HEADBOARD, maple, BOX SPRING & MATTRESS (full size), steel frame, good condition, $20. G. W. COX, GA 9-4764. A

FOR SALE

SLIDE and two-seat MERRY-GO-ROUND, small, very good shape except for paint, $10 or $15 for both. CHARLOTTE R. WARREN, DA 6-6526. A

SLIDE PROJECTOR, T.D.C. 35mm automatic 300-watt, case and 4 magazines, cost $95, $45. PL 2-9516 days only. A

CHEVROLET CONVERTIBLE, 1950, $375. R. L. NERONE, VE 8-6617. A

FORD STATION WAGON, Country Sedan, 1955. Ford-o-matic, other extras, small equity wanted, take over payments. ME 0-2142. A

LOVE BIRDS, African Peach faced and aviary, $15. B. E. GENTRY, OS 6-2113. A

BARBECUE, Big Boy, with electric spit and oven, stainless steel, sells for $160, like new, $70 or best offer. OS 5-7903, after 4:30 p.m. A

DOG, 9-month old boxer, had shots. MRS. ROBERT GUILMETTE, FR 9-2545. A

FRAZER, 1947 4-door, new paint, $75. MURIEL H. PARKER. Write to Northrop News, Box 1030. A

LIVING ROOM TABLES, 3 blonde modern, good condition, cost $170, $50; deluxe Kenmore IRONER, used very little, cost $149.50, $85. H. FORNEY, OR 1-9731. A

SPIN DRIER, 1955 deluxe model Easy, with timer, $140, retail price $219, used only few months. PAULA BELLERUE, FR 4-8036, after 5:00 p.m. A

TIRE CHAINS, one pair, 16x6.50, never used, $6.50. R. L. RICKARD. CH 7-8296. A

CHEVROLET, 1952 4-door deluxe, conventional shift, $675 full price, cash. IRVING E. SCHEBE. NO 2-5388. A

HOUSE, GI resale, 3 bedroom, rear living room, 3 years old, stall shower, thermostatically controlled heat, patio, 2 car detached garage, block walled back yard, $13,950; ¾ BASE CELLO, perfect shape, case, extra strings, bow, $100. E. WALTERS. OS 5-2382. A

BABY BASSINET, SCALE and TEETER BABE (bouncy baby seat), $8 takes all. KEN KLIER, FR 9-0706. A

REFRIGERATOR. Crosley Shelvador, 11 cu. ft.; O'Keefe & Merritt deluxe GAS RANGE; Westinghouse deluxe ELECTRIC DRYER; maple living room, dining room and bedroom FURNISHINGS, all in excellent condition, half price. C. A. ULERY. KE 5-7539. A

PARACHUTE, 100% nylon, almost new, full size, $7; FOG LIGHT, new, fits center of grille of 1949 and 1950 Fords, arm included. $5. W. E. PEITHMAN, DA 4-0930. A

FISHING BOAT, 27', small cabin, no engine, boat in water. $325, terms; TEARDROP TRAILER, factory made, all aluminum, butane stove, ice box, bed, $175; 1922 DODGE converted into tractor, new 12 volt battery, dual tires, truck rear end, $75; full competition CHEV. 4 banger, $50. BILL WILLIAMS, OS 6-8860, days A

DINETTE SET, blonde, modern style, table, buffet, 6 chairs, buffet has glass enclosed hutch, like new, cost $350, $175. C. W. NASH. OR 8-8305. A

HOUSE TRAILER, cheap for cash, sleeps 4. JANE VARVIL. FR 5-8647. A

ROLLER SKATES, ladies', Chicago, size 6. $10; one pair Duncan-Phyfe end table COMMODES, $14; 2 piece LIVING ROOM SET, wine color. $20. HARLAN P. RUTTER. EX 6-7227. A

TIRE CHAINS, heavy, 16x6.50, never used. $5. E. H. RUSA. OS 5-2852. A

TRAILER, 2 wheel, 4'x8', with trailer hitch. DA 4-7656, after 4:30 p.m. A

CHIHUAHUA PUPPY, AKC registered long coat, male, champion sired, reasonable. WILLARD A. GEIERSBACH, DA 4-3018. A

OLDSMOBILE, 1949, "88" 2-door sedan. J. P. DICKEY AX 1-7796. A

PING PONG TABLE, regulation and 4 paddles, $20; 20 lbs. STRIP WOOL for braiding or hooking rugs, 50c lb.; 55' new lead coated UNDERGROUND WIRing, #14, $12; 4 drawer CHEST, $5. EA 2-0080. A

FORD COUPE, model "A", very clean, seal-beam lights $80. L. A. WILLIAMS, FA 8-4938. A

REFRIGERATOR perfect condition, 6 cu. ft., $75. PL 1-5719. A

ICE SKATES, CCM, women's, white, size 9, $10; men's black, boots only, size 10, $4; MODEL AIRPLANE KIT manufacturing supplies, balsa wood, decals, wheels, propellers, boxes, also printing press plates for plans and printed parts, total value over $1500, make offer. GORDON D. MADISON. Write to Northrop News, Box 1029.

DOBERMAN PUP, red, born Dec. 5, 1955, female, AKC registered, Rancho Dobe stock. MILDRID STARK, PL 9-3207. A

FORD, '49 2-door grey, $400 or reasonable offer; Frigidaire REFRIGERATOR, $35. LAWRENCE PETSCO, PL 8-3967. A

RECORD PLAYER. Webster Chicago 78 rpm, own speaker, $10; RCA 45 RECORD PLAYER, plugs in through radio, nearly new, $10. BLANCHE RUNSWICK, OR 7-3514. A

NASH, 1955 Statesman's Country Club, hard top, extras, $100 cash for equity, take over payments or refinance. LAWRENCE J. TURNER, GA 3-4926. A

ROTO RANGER, Simpson Multi Miter, cost $85, $25; Sita Flex FISHING ROD, Penn 25# reel mono. $20; Pacific SPINNING REEL, extra spool, $20. JEROME G. HARKEY. LO 5-2497. A

(Continued on Page 5)

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)
WESTERN & EXPOSITION, Los Angeles. EMMETT D. BELL (5503-40202, Ext. 2681). RE 3-3657. 12-1

(Zone 4)
ATLANTIC & TWEEDY BLVD., South Gate. (Will pick up from Atlantic to Crenshaw, car pool considered.) SAM DWYER (5515-42529, Ext. 1825). LO 7-6779. 12-4

IMPERIAL BLVD. & LAKEWOOD BLVD., Downey. (Will pick up anyone anywhere along Imperial.) M. KRAVETS (5502-18009, Ext. 2741). TO 9-8937. 12-4

(Zone 5)
SOUTH & BELLFLOWER OR CLARK, Lakewood. (Just off South St. on Hersholt Ave., intersections South or Clark Sts.; call at home after 5:00.) EDITH MANTENFEL (5224-15483, Ext. 640). TO 6-2553. 12-5

(Zone 8)
TORRANCE BLVD. & CRENSHAW BLVD., Torrance. LEO A. LABRIE (5587-82, Ext. 1947). FA 8-1848. 12-8

7:30 a.m. — 4:15 p.m.

(Zone 4)
FIRESTONE & LONG BEACH BLVD., South Gate. (West on Manchester, south on Crenshaw to Plant.) M. BROWN (9350-27999, Ext. 474). LU 5-3067. 13-4

(Zone 7)
VERMONT & 182ND, Gardena. (Car pool desired.) GRACE HAZLETT (4110-13375, Ext. 2331). 13-7

(Zone 9)
PALOS VERDES BLVD. & CALLE MAYOR, Redondo Beach. (Via 101 to Hawthorne to Redondo Beach Blvd. to Prairie; car pool desired.) STEVE SMITH (3535-42851, Ext. 2035). FR 5-6695. 13-9

(Zone 10)
HERMOSA BEACH. (From my home to 4th and Hermosa Ave. to Manhattan Beach Blvd. to Crenshaw to Plant 3.) R. LOCKWOOD (5530-21204, Ext. 2610). FR 2-8260. 13-10

(Zone 13)
WASHINGTON & SEPULVEDA, Culver City. (Car pool considered.) B. D. KAMBERG (3275-30278, Ext. 2503). EX 7-7750. 13-13

3:45 p.m. — 12:15 a.m.

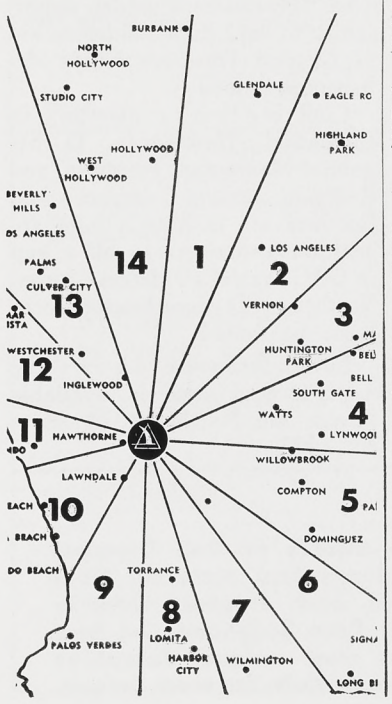
(Zone 5)
ROSECRANS & PIONEER, Norwalk. OTTO L. EBNER (5411-17439, Ext. 1491). TO 3-9542. 16-5

4:45 p.m. — 1:15 a.m.

(Zone 2)
FIGUEROA & 11TH ST. OR GEORGIA, Los Angeles. H. K. LITTY (5508-19781, Ext. 1333). RI 8-9069. 18-2

(Zone 5)
ROSECRANS & STUDEBAKER RD., Norwalk. (Route: Rosecrans all the way.) J. RAMIREZ (5504-39977, Ext. 1808). 18-5

Zone Map



RIDES OFFERED

Miscellaneous (Split Shifts)

(Zone 9)
HAWTHORNE AVE. & HWY. 101, Torrance. (Traveling Pacific Coast Hwy. 101 from Walteria to Mariposa Whse.; willing to travel Hawthorne Ave. as required; Mariposa hours: 7:15 a.m. to 4:00 p.m.) J. E. MINTER (5237-31737, Ext. 3-243). DA 6-4195. 20-9

PALOS VERDES DRIVE & OLD SEPULVEDA, Torrance. (Car pool desired; hours: 7:30 a.m. to 6:15 p.m.) HAROLD FLETCHER (3532-42732, Ext. 463). FR 5-1862. 20-9

(Zone 13)
MULHOLLAND & BEVERLY GLEN BLVD., West Los Angeles 24. (Route: Beverly Glen Blvd., Pico, Manning Ave., National Blvd., Washington, La Cienega, Freeman, Century and Prairie. Hours: 7:30 a.m. to 5:00 p.m.) JOHN SLOAN (8400-42738, Ext. 1880). GR 7-2820. 20-13

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 1)
OLYMPIC & HOOVER or Vermont, Los Angeles 6. (Please call after 6:00 p.m. or leave message at DU 2-3952). SAM SAKI (5583-41862, Ext. 2097). DU 4-2637. 2-1

WESTERN & EXPOSITION, Los Angeles. EMMETT D. BELL (5503-40202, Ext. 2681). RE 3-3657. 2-1

(Zone 3)
GARVEY & VALLEY BLVD., Puente. J. R. SILVA (5354-35977, Ext. 468 or 467). ED 7-8043. 2-3

(Zone 4)
ATLANTIC & TWEEDY BLVD., South Gate. (Will pick up from Atlantic to Crenshaw, car pool considered.) SAM DWYER (5515-42529, Ext. 1825). LO 7-6779.

(Zone 5)
ORANGETHORPE & NICHOLAS, Fullerton. JOHN MATYAS (5501-17476, Ext. 2200). LA 5-9351. 2-5

WOODRUFF & CONANT, Lakewood. MARIAN SQUILLANTE (5507-36200, Ext. 725). GA 1-1521. 2-5

(Zone 6)
BROADWAY & 166TH, Gardena. EDNA JACKSON (5352-25560, Ext. 1508). 2-6

CHERRY & 61ST, North Long Beach. GEORGE C. CLEMENTS (5251-19826, Ext. 2576). GA 3-3474. 2-6

(Zone 8)
YUKON & 171ST ST., Torrance. JOSEPH J. SCHMIDT (5445-17470, Ext. 1926). DA 4-5091. 2-8

(Zone 9)
COMPTON OR 154TH ST. & AVIS, Lawndale. K. T. RHODES (5503-18245, Ext. 2681). 2-9

(Zone 10)
ROSECRANS & HIGHLAND, Manhattan Beach. (Will leave at 3:45 or 4:15.) WARREN McARTHUR, JR. (5223-15320, Ext. 1485). FR 2-7789. 2-10

(Zone 12)
AIRPORT & ARBOR VITAE, Los Angeles 45. HOMER L. WEBSTER (5374-42866, Ext. 2094). OR 2-4153. 2-12

(Zone 14)
WEST BLVD. & MANCHESTER BLVD., Inglewood. EVA C. LANDHERR (5507-34692, Ext. 725). PL 2-7693. 2-14

7:30 a.m. — 4:15 p.m.

(Zone 2)
NORMANDIE & 94TH ST., Los Angeles 44. T. PRESTON LEGG (8620-29269, Ext. 1751). PL 4-1417. 3-2

(Zone 5)
SANTA ANA FREEWAY & FLOWER ST., Orange. (Need ride desperately.) JEAN SWIECH (3351-32606, Ext. 1451 or 1415). KE 8-6300. 3-5

(Zone 7)
VERMONT & 182ND, Gardena. (Car pool desired.) GRACE HAZLETT (4110-13375, Ext. 2331). 13-7

VERMONT & 228TH, Torrance. BARBARA PENKE (3140-27944, Ext. 454). FA 8-1628. 3-7

(Zone 8)
ARLINGTON & TORRANCE, Torrance. JEAN JONES (9330-42917, Ext. 2228 or 2229). 3-8

CRENSHAW BLVD. & 174TH ST., Torrance. F. E. BURFORD (5930-24850, Ext. 573). DA 3-0634, 3-8

BBSF CLASSIFIEDS

(Continued from Page 4)

FOR SALE

FIREPLACE LOGS, ornamental, electric, excellent condition, $10. ROY A. BALLING, VE 9-7378. A

HOME, 3 bedrooms, w/w carpeting, fireplace, TV rumpus room, hobby room, fenced yard, lighted cement tennis, volley ball and badminton court, 3 blocks from Northrop, $3000 down. OS 6-8118. A

TV, 17" Traveler, console, mahogany, pushbutton tuning, half doors, excellent condition, $85. C. W. NASH, OR 8-8305. A

DEEP FREEZE, 21½ cu. ft., chest type, storage compartment, 2 years old; Sears CHEMICAL TOILET, fits house trailer, 3 months old; Birk-Lock CHAIR, green plastic, blonde legs, no mars or scratches. OS 5-7993. A

GAS RANGE, 30" Wedgewood, 1½ years old, glass oven door, clock, $75. PL 4-2726. A

HOME, 3 bedroom, 2 years old, w/w carpeting, fireplace, garbage disposal, double garage, landscaped, block wall, Lancaster, $15,250. BERN M. RICE. Write to Northrop News, Box 1031. A

RESIDENTIAL LOT, 60x135, 21 orange trees, cash or terms, Fontana, $1500. A. CHURCHMAN, JR., VA 2-6401. A

HUDSON, 1946 4-door, clean, $50. JIM OBBEMA, OS 5-4333. A

TWO-WHEEL TRAILER, sleeps two, kitchen, ice box, good tires, many extras, $75. T. M. CHARLES, PL 8-2818. A

BOXER PUP, pedigreed, 8 weeks old, housebroken, $40 or best offer. BARBARA PFAUS, OR 7-8840. A

HOME in Gardena, 2 bedroom, redwood fenced back yard, 1 block from new Gardena Senior High, lot 55'x120', $8500 full price; must sell following items in hurry: Wedgewood RANGE, $50; automatic defrost REFRIGERATOR, $90; Barca Lounger reclining CHAIR, $75; 21" TV, $65; wrought iron SOFA-BED, $30; DOUBLE BED, $35; automatic WASHER, $90; tap water STEAM IRON, $7; steel IRONING BOARD, $5; all like new, or best offer. DALE H. CROTHERS, DA 3-0326. A

WANTED TO BUY

LITHOGRAPH PRESS hand operated for art work. CHARLES CINCONE, OR 4-1822. B

PLAYER PIANO, music rolls, trade or buy. VINCENT VITALE, PL 5-7562. B

ELECTRIC DRILL ¼", also good VISE wanted. M. KRAVETS, TO 9-8937. B

WANTED TO BUY

COINS, old U.S. Indian head pennies, barber dimes, other U.S. coins. Need current Lincoln head pennies dated before 1940. Should not be mutilated, pay face value plus market value. LESLIE MATTHIES. Write to Northrop News, Box 1025. B

ANTIQUE AIRPLANE, regardless of condition, must be 25 yrs. or older, will pay fair price. EARL J. HAAG, EX 7-1398. B

TRANSFORMER for Hi Fi amplifier Acro sound TO-300, Also need speaker. C. T. DORSETT, DO 7-5928. B

LAND. Approximately three acres smog-free wooded area, within one hour driving time from plant, frontage not required, desire access road to main highway, water necessary. Will also consider acreage with existing building. W. S. COOK, DA 6-2467 evenings and weekends. B

TUNER AND AMPLIFIER FM-AM, must be reasonable. LARRY LAUER, FR 4-4140. B

WASHER Bendix, bolt down type, must be in working condition. Round or square type. RAY GRISH, FR 2-4673. B

TRUNKS, two, good condition. Write to Northrop News, Box 1012. B

DRAFTING MACHINE with plastic scales. H. B. WATERMAN, WE 5-6824. B

BICYCLES, two small, or TRICYCLES. OS 6-7461 after 5 p.m. B

BARBELL AND DUMBELL SET, any reasonable price. GENE M. FULLER, OS 5-8251. B

PIANO, small upright, reasonable. T. J. ESTERBROOK, OS 5-8644. B

TRAILER HOME, 1952 to 1955, 30' to 35'. Write to Northrop News, Box 1028. B

REFRIGERATOR, modern, left hand opening, will pay cash. OR 1-1107. B

STATIONARY TUB, must be reasonable. MYRTLE RIDDLE, OR 7-5080. B

CAMPING OR TRAVEL TRAILER, not over 20' long, good condition, newer than 1950 model, send complete description. Reply in writing to Northrop News, Box 1033. B

FOR TRADE

GOLF CLUBS, leather bag, deluxe Bag Boy cart, also Girard-Perregaux WRIST WATCH. Will trade for power woodworking tools. Must be first class condition with motor. HOWARD W. GILL. Write to Northrop News, Box 1019. C

FOR TRADE

VACATION HOUSE TRAILER 14' Traveler, sleeps 5, used 5 times. Will trade as part down payment on income units, must be reasonable, give full details. Write to Northrop News, Box 1017. C

MANIFOLD, four-throat, for flat-head Merc. or Ford, new (less carb.), will trade for comparable two jug manifold with linkage. R. BECK, TO 4-9392. C

TROPHY 25¾" gold (type) plated. Genuine walnut base, slightly used, excellent condition, trade for 1923 Essex or what have you. No reasonable offer refused. E. A. SCHROEDER. Write to Northrop News, Box 1026. C

MODEL A, 1930 Roadster in good condition for pickup, panel or light truck. FR 2-7103. C

FURNITURE AND APPLIANCES, for camping or travel trailer up to 20 ft., made after 1950 and in good condition. DALE H. CROTHERS. Reply in writing to Northrop News, Box 1032. C

FOR SALE OR TRADE

JAGUAR 1954 XK120, wire wheels, will consider older model car in part trade; preferably Ford or Chev. NORMA L. CLARKE, EX 8-1424. M

HI-FI AMPLIFIER, 15w, want rifle or gun. A. FERNANDEZ, AN 3-7620, 6:30 to 8 p.m. M

LAND, $700 equity in $1150 lot, near Big Bear or will trade for Jeep in good condition. LEO M. SATTERLEE, OR 7-4614. M

GERMAN LUGER 9mm, excellent condition, best offer takes, trade for what have you? DAVID L. YOUNG, OR 4-4136. M

WASHING MACHINE, Sears Deluxe wringer type, sell for $35 or trade for typewriter or ¾ h.p. electric motor. E. J. KIMLING, FR 4-6429. M

BUICK, 1941 sedan, $75, or trade for refrigerator. L. A. CRAWFORD. Write to Northrop News, Box 1023. M

BSA, 1948, 250 cc, $225, will accept monthly payments or will consider multilith machine as part payment. WARREN L. LIBERTY, LAmbert 5-6027. M

T.V., 17" table model wood cabinet, $75 or trade for shop tools or what have you?; TRAILER HOUSE, sleeps four, 27' long Alma, built in '45, perfect condition, trade for equity in house or sell for $800 or less for cash. FR 4-7895 before 3 p.m. M

(Continued on Page 6)

Going My Way

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 9)
PALOS VERDES DR. & CALLE MAYOR, Redondo Beach. (Ride or car pool wanted from Hollywood Riviera vicinity.) J. TERRE (5142-23606, Ext. 2042). FR 5-1917. 3-9

PALOS VERDES BLVD. & CALLE MAYOR, Redondo Beach. (Via 101 to Hawthorne to Redondo Beach Blvd. to Prairie; car pool desired.) STEVE SMITH (3535-42851, Ext. 2035). FR 5-6695. 3-9

INGLEWOOD AVE. & 164TH, Redondo Beach. CLAUDETTE A. FORBES (1421-39203, Ext. 1811). 3-9

REDONDO BEACH BLVD. & INGLEWOOD BLVD., Lawndale. BETTY DAVIS (3120-42842, Ext. 1551). FR 9-7867. 3-9

(Zone 10)
MARINE & SEPULVEDA, Manhattan Beach. JIM JANIS (3551-33929, Ext. 566). FR 2-8629. 3-10

MANHATTAN AVE. & 31ST St., Hermosa Beach. NANCY COOPER (9330-42743, Ext. 1471). FR 9-8089. 3-10

(Zone 12)
LENNOX & TRURO, Inglewood. (Need ride home at 4:15; near Inglewood Ave.) JEAN SPIKER (3420-40424, Ext. 1223). OR 7-2857. 3-12

CENTURY BLVD. & INGLEWOOD AVE., Inglewood. C. P. MOYER (5260-35307, Ext. 683). OR 1-0053. 3-12

LOYOLA BLVD. & 93RD PL., Los Angeles 45. (Will join car pool from West Westchester.) MIKE LEPPANEN (3870-33838, Ext. 2168). PL 6-0252. 3-12

GILMORE AVE. & CENTINELLA, Venice. ETHEL M. DAVIS (5128-14396, Ext. 1786). EX 7-0450. 3-12

(Zone 13)
CENTINELLA BLVD. & CEDAR, Inglewood. JOANN TRIPP (3000-25492, Ext. 2626, 2627). OR 2-8637. 3-13

GREVILLEA & BUCKTHORNE, Inglewood. (Will meet ride at Grevillea & Arbor Vitae or Buckthorne & La Brea.) MINNIE M. LAUER (9380-28072, Ext. 2254). OR 4-1847. 3-13

SANTA MONICA BLVD. & SEPULVEDA BLVD., Los Angeles 25. (Car pool considered.) RICHARD W. KING (3410-33809, Ext. 2461). GR 7-1937. 3-13

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 13)
SEPULVEDA & VENTURA, North Hollywood. JEANNE BOUL (8320-42854, Ext. 1832). ST 9-5391. 3-13

PICO & ROBERTSON, or Pico & Beverly Dr., Los Angeles 35. JEAN FERRUCCI (8322-37306, Ext. 1605). CR 1-7310.

WASHINGTON & SEPULVEDA, Culver City. (Car pool considered.) B. D. KAMBERG (3275-30278 Ext. 2503). EX 7-7750. 3-13

ARBOR VITAE & WALNUT, Inglewood. (Need ride in morning only.) JUDITH ANDERSON (3315-42869, Ext. 460, 414). OR 7-6688. 3-13

(Zone 14)
CENTINELA & LA BREA OR HYDE PARK Inglewood. (Will be glad to meet at either intersection at time designated by driver.) ALLIE M. STEINMETZ (3472-13205, Ext. 406, 1988, 1949). 3-14

3:45 p.m. — 12:15 a.m.

(Zone 3)
BROADWAY OR MAIN & 92ND, Los Angeles 8. ROBERT H. BEGOY (5503-39392, Ext. 2681). 6-3

(Zone 5)
VALENCIA & WEST AVE., Fullerton. JOSEPH VELISEK (5501-42475, Ext. 2200).

(Zone 9)
PRAIRIE & 182ND, Torrance. SAM P. BOSTON (6721-15, Ext. 3-1255). FR 2-3945. 6-9

4:45 p.m. — 1:15 a.m.

(Zone 1)
VERMONT & SANTA MONICA, Los Angeles 29. JOHN F. NOTTINGHAM (5583-85, Ext. 2097). NO 5-5111. 8-1

(Zone 2)
CRENSHAW & IMPERIAL, Inglewood. S. A. SUCAMELE (5508-19668, Ext. 1333). OR 2-8771. 8-2

(Zone 5)
DEL AMO & PARAMOUNT BLVD., Lakewood. D. R. ALARCON (5501-42442, Ext. 2741). GA 3-9026. 8-5

(Zone 6)
AMERICAN & 7TH ST., Long Beach. RALPH MONACO (5162-41447, Ext. 548).

RIDES WANTED

4:45 p.m. — 1:15 a.m.

(Zone 12)
LENNOX BLVD. & INGLEWOOD AVE., Lennox. ED. J. MEYERS (5373-16743, Ext. 1488). OR 7-3890. 8-12

(Zone 14)
LA BREA BLVD. & BEVERLY BLVD., Los Angeles 36. CHRIS BOYKIN (5373-16730, Ext. 1488). WE 8-9293. 8-14

12:15 a.m. — 7:00 a.m.

(Zone 13)
CENTINELA & FREEMAN AVE., Westchester. (One block south of Centinela on Freeman Ave.) SAM VEGA (5501-42155, Ext. 2200). 9-13

Miscellaneous (Split Shifts)

(Zone 1)
ARBOR VITAE OR 91ST ST. (near Crenshaw & Manchester), Inglewood. Mariposa hours: 4 p.m. to 12:30 a.m.) KAY LAM (6270-25514, Ext. 631). PL 5-0752. 10-1

(Zone 2)
VERMONT & 51ST ST., Los Angeles. (Hours: 4:15 p.m. to 12:45 a.m.) GLORIANNE JONES (9330-41955, Ext. 2228). PL 9-7498 10-2

(Zone 8)
TORRANCE AVE. & WESTERN BLVD. or 190th & Western, Torrance. (Mariposa hours: 6:45 a.m. to 3:30 p.m.) LUCY J. OSTROM (6710-25973, Ext. 1109). FA 8-0115. 10-8

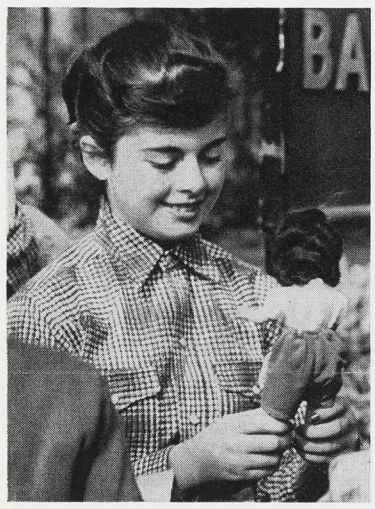
(Zone 9)
TULITA & AVE. C, Redondo Beach. (Mariposa hours: 6:45 a.m. to 3:30 p.m.) LORI LYDON (6230-13839, Ext. 3-215), FR 5-6693. 10-9

PALOS VERDES DRIVE & OLD SEPULVEDA, Torrance. (Car pool desired; hours: 7:30 a.m. to 6:15 p.m.) HAROLD FLETCHER (3532-42732, Ext. 463). FR 5-1862. 10-9

(Zone 10)
HERMOSA AVE. & 16TH ST., Hermosa Beach. (Can also be at Pier Ave. & Hermosa Ave.; Mariposa hours: 6:45 or 7:15 a.m. to 3:30 or 4:00 p.m.) CHARLOTTE R. WARREN (6710-41000, Ext. 3-1232). 10-10

Norcrafters Display Generous Hearts To Less Fortunate at Christmastime

THE SPIRIT OF CHRISTMAS—. Pictured are some of the thousands of gifts contributed by generous Norcrafters to the 97 families "adopted" by various departments at Northrop prior to the Christmas holidays. (See story for details.)



DOLL FINDS HOME—. One of several hundred dolls dressed by Norcrafter ladies finds home with happy youngster at the Baptist Children's Home.

Christmas is over but the spirit of Christmas still lingers in the remembrances of those Norcrafters whose generosity helped lighten the burdens of less fortunate families during the holidays.

Prior to the season Norcrafters in many departments chose to "adopt" a family in need and many appealed to Mal Mountain, Personnel Activities, for case history reports and suggestions relative to specific needs of their chosen family.

Some of the larger departments adopted two or more families while smaller departments joined together to assist one, but in all cases the motive was the same—a sincere desire to help make Christmas a happier time for someone.

On December 21 the symbols of their generosity began to arrive at the NRC Clubhouse. The total was amazing — hundreds of cans of food, turkeys, hams, flour, sugar, clothing enough to

BY AIREPORTER

stock a small store. Christmas trees complete with ornaments and lights, blankets, furniture. TV sets, washing machines, and toys — dozens of bicycles, tricycles, wagons, and scooters, hundreds of dolls — and more than $5000 in cash.

Other departments elected to send gifts and money to pet charities such as hospitals and orphanages. One department donated a TV set complete with repair services for one year to their chosen orphanage, another department sent well chosen gifts to a mental hospital.

Although the gifts and the causes varied, the net result was a magnificent display of Norcrafter generosity toward their fellow men.

MEET MILLIE—. Elena Verdugo, of CBS TV "Meet Millie" program selected prize winning dolls from display at annual NRC Doll Dressing Contest. (Winners below.)

BBSF CLASSIFIEDS

(Continued from Page 5)

FOR SALE OR TRADE

GOLF CLUBS. 3 Spalding woods, 8 matched McGregor irons, excellent condition, $70. A. E. AKERS, OS 6-5571. M

BUICK, '47, 4-dr. Super, make offer or will trade for upright piano in good shape. C. W. DARNELLE, OS 6-7542 after 4:30 p.m. M

WASHING MACHINE 1950 Kenmore wringer type, $50, or trade for automatic record player. OS 5-1035. M

HOME, 2-bedroom, 2 minutes from Northrop, sell or trade for farm in Missouri area, $8500. W. J. COOPWOOD, OS 5-3596. M

PIANO, large up-right, has been well cared for, must sell, $95, or will trade for large trailer, at least 5'x12', in top condition. C. G. INGRAM, PL 7-1624. M

BABY BED, springs included, and CHEST OF DRAWERS, $30 or good 35mm slide projector. JOHN SLOAN, GR 7-2820. M

RENTALS OFFERED

SHARE HOME, 2 young men have home to share with another young man, TV, cooking, maid service, close to Northrop, $30 month. DUG DUNGAN, OS 6-4008.

ROOM AND BOARD, private home, gentleman, Manchester-Vermont area. PL 2-7900. E

APARTMENTS, 2-bedroom, unfurnished, new building, $70 month; 1 bedroom, modern, garbage disp., garage, $65 month. W. A. SWART, NE 8-5086 after 4:30 p.m. and weekends E

ROOM & BOARD, clean, good food, reasonable rates R. L. FRAIM, PL 4-1105.

APARTMENT, new 2-bedroom unfurnished, 1 blk. from ocean, near Hermosa Beach business district, garage, garbage disposal, automatic washer and dryer, $85. LESLIE GREER. FR 2-3452. E

HOME, 2-bedroom, Lawndale, garage, garbage disposal, house just completed, $75 per month. AX 1-5029. E

APARTMENTS, new deluxe, one-bedroom unfurnished, garage, garbage disposal, near Crenshaw-Imperial shopping center, $75 mo. PL 4-4960. E

SHARE APARTMENT. Young gent 22 will share two bedroom apt. with same. TV, laundry room, all new furniture, $40 per month. OR 4-2863. E

DUPLEX, one bedroom, unfurnished, one year old, garbage disposal, garage, North Inglewood, $65 per month. SHIRLEY JOHNSON, OR 7-6655 after 5 p.m. E

APARTMENT, 1-bedroom, in new apt. building. East 126th St., walking distance to Northrop. OS 6-4229. E

ROOM AND BOARD, one person, private bath. JOYCE CARON. Write to Northrop News, Box 1013. E

ROOM, nicely furnished, private home, 1 man, $6 per wk. R. H. SPRINGER. Write to Northrop News, Box 1010. E

APARTMENTS, new 1 and 2 bedroom, unfurnished, thermo heat, garbage disposal, garage, near Century and Crenshaw, $77.50 and $95. EX 6-6823 or EX 9-5587. E

APARTMENT, large, new, 1-bdrm., near Plant 1, $75 per month, unfurnished. OR 2-3201. E

APARTMENT, one-bedroom, stove and refrigerator, furnished, garbage disposal, water paid, Lawndale, almost new, $50 month. EVERLEY. PL 6-6603. E

ROOM, private home, 7 minute walk to Plant #3, $9 week, also ⅓ garage available. MELVIN LILLIG, OS 5-5663. E

SHARE HOME, one or two working ladies to share 3-bedroom home, Morningside Park, kitchen privileges if desired, garage, TV. PL 4-8289 after 2 p.m. E

KITCHENETTE APT., small, one room, Redondo Beach, one block from ocean, utilities paid, includes garage, $50 month. GEO. H. IESHER. FR 2-2418. E

SHARE HOME. Two young men have a Westchester house to share with third party. $35 month. OR 4-0112. E

DUPLEX, new, 1 bedroom, furnished except linens, utilities paid, all new furniture, $100, or $90 on long lease, pets extra, teenagers OK, w/w carpet, TV, garage, janitor service; also one older 2 bedroom, nicely furnished, w/w carpet, TV, same terms, Hermosa Beach. SMITH, FR 4-5427. E

HOUSE two bedroom, unfurnished, large back yard, $75 per month; one-half DUPLEX, furnished, $60 per month. ANDREW S. KERMES, OS 5-5762. E

APARTMENT, 2 bedroom, with sundeck, unfurnished, Manhattan Beach, 1 block from ocean, available Jan. 25. FR 5-4118. E

RENTALS OFFERED

APARTMENT, 1 bedroom, unfurnished, front, two blocks from Plant 1, dinette, large kitchen, service porch, private garage, available Feb. 1, adults only, $75 month. OR 8-8305. E

APARTMENT. Bermuda modern, 2 bedroom, Hollywood Riviera, single level, garage, open beam ceilings, garbage disposal, $95. AKIN or NERONE. FR 5-9507. E

HOUSES, 2, 2-bedroom, unfurnished, brand new, garages, all conveniences, children OK, near 139th and Yukon, Hawthorne, water paid, $75 month. OS 5-1508. E

RENTALS WANTED

APARTMENT, furnished, single, utilities paid, Inglewood area, not over $60. Write to Northrop News, Box 1015. F

HOUSE OR APARTMENT, two-bedroom, furnished, prefer beach area. EA 2-1775.

HOUSE, one-bedroom unfurnished, needed by Feb. 1, prefer Hawthorne or Inglewood area. MARLENE SPREITZER, OS 5-1098. F

CHILD CARE OFFERED

CHILD CARE, ages 3 to 10 yrs., lawn play yard, fenced, play equipment, birthday parties, hot lunches, naps, snacks, near school, day or night shifts. OS 5-7993. G

BABY SITTING, parents must arrange transportation, can furnish references, Write to Northrop News, Box 1021. G

CHILD CARE. Will care for one child in my home, days as companion to my 1½ year old girl, large play area, fenced yard, lunches and naps, $15 per week. OR 2-1572. G

CHILD CARE WANTED

CHILD CARE. Woman to care for two children, ages 3 and 4, 7 a.m. to 4:30 p.m. OS 6-7461 after 5 p.m. H

CHILD CARE. Care of boy 7 needed, second shift vicinity of York school, Hawthorne. OS 5-7572, before 4:30 p.m.

PERSONALS

FREE HOME for girl working days in exchange for watching children while mother works nights. FR 4-3259. L

RIDE OFFERED to Seattle, Wash., in my car, going one way, share expense. DORIS KAISER. OR 1-9375. I

THANKS. We wish to extend our thanks to all Norcrafters for all they have done for our family in our time of need. MR. & MRS. FRANK INDELICATO. I

SEWING AND ALTERATIONS, ladies' and children's, furnish own materials and pattern. Write to Northrop News, Box 1022. L

WE WISH to express our appreciation to the personnel of Depts. 5930, 5950 and 7510 for their kind expressions of sympathy in the recent loss of our son. RUTH and CURTIS CRAIG. L

OBSERVER CORPS VOLUNTEER AID SOUGHT BY CD

Recent establishment of an observation post atop the Hermosa Biltmore Hotel gives South Bay area Norcrafters a golden opportunity to lend their volunteer aid to Ground Observer Corps defense operations.

Civil Defense directors in Inglewood, Hawthorne, El Segundo, Manhattan, Hermosa, and Redondo Beach, Torrance, and Gardena are making a joint appeal for volunteers to fill a gap in GOC coastal air defense ranks, Northrop CD Coordinator Jerry Baker has stated.

Full information about the newly-located post is available from the Northrop CD office, ext. 1972.

PRIZE WINNERS—. Top awards in Doll Dressing contest went to the six Norcrafters pictured, from left: Donna Williams, 3rd best dressed; Dorothy Baldwin, 2nd best dressed; Fern Scaglione, 1st best dressed; Marion Price, 1st most unique; Josephine Carson, 2nd most unique; Sarah Holt, 3rd most unique.

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commisisoners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
League play now in progress Mondays, 6:30, Fremont High School; Thursdays, 6:30, John Muir Jr. High School.

BIBLE STUDY, Roy Stahl
Meet daily, Plant 1, east mezzanine conference room, 11:15 a.m.; Plant II, M.W.F. 12:00 conference room M1-B1, T.Th. 12:30 conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Wayne Chamberlin

BOWLING (nights), Garland Steiner
Winter leagues now in progress.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m. Next—January 24.

CAMERA CLUB (days)
Meet 1st & 3rd Friday evening, 7:30 p.m. Next—January 20.

CAMERA CLUB (nights), Gene Beck
Meet 1st & 3rd Saturday, 7:30 p.m. Next—January 21.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next—January 25.

GOLF, Andy Titus

GOLF (nights), Lee Baker
Three-Club Tournament February 26, Fox Hills. Applications available in Personnel Activities.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—January 30.

MIXED CHORUS, Florence Graveline
Meet every Tuesday evening, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m. Next—February 6.

MODEL RAILROAD CLUB, John Felder
Meet every Sunday morning, 9:00 a.m., and every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays. Next—January 23.

RADIO CLUB
Meet 3rd Tuesday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—January 21.

SKI CLUB, Howard Fletcher
Meet every Thursday evening, 7:30 p.m.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Next—January 24.

EXCLUSIVELY FOR THE LADIES

BASKETBALL, Pam Thompson
Practice sessions Alondra Park Gym, Tuesday evenings.

BOWLING (days), Lee Hopkins
Winter leagues now in progress.

INTERIOR DECORATION
Weekly meetings in lampshade making every Thursday evening, 7:30 p.m.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet Tuesdays, 7:00 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Hetty Horner
Meet first and third Thursdays, 7:30 p.m.

NRC IN SAFETY TRAINING

SAFETY IN RECREATION—. In planning session for NRC Boat Club safety training program are left: Elmer Chiodo, Boat Club; Harry Clark, general supervisor, PA&S; Lee Johnson, chief safety engineer; Ed Freitas, Boat Club commissioner; Eddie Truax, PA&S. Training will be under direction of U.S. Coast Guard.

NRC BOAT CLUB USCG PROGRAM

Within the next few months many NRC clubs will begin safety training programs related to their club activities. The first of these training programs will be sponsored by the NRC Boat Club.

The Boat Club has made arrangements with the United States Coast Guard Auxiliary for a course of instruction in small boat handling and safety at sea. The course will begin on Thursday, February 2, and continue weekly for a period of ten weeks.

Instruction will include proper operation of small boats, rules of the sea, navigation and associated subjects.

The course will be given free of charge and those members who complete the ten week training period will receive a certificate from the U.S. Coast Guard Auxiliary.

All Norcrafters interested in enrollment are invited to contact the Personnel Activities office, Plant I, extension 2784, for additional information.

Model RR Open Doors on Sunday

By HAL HUNSBERGER
President
Northrop Recreation Club

Model Railroad enthusiasts will be happy to note that the club facilities at 4411 West Redondo Beach Boulevard will be open every Sunday from now on at 9 a.m.

The Sunday meetings will be in addition to the regular Thursday evening meetings at 7:30. All Norcrafters are invited to stop by on either day.

★ ★ ★

Eddie Truax, Personnel Activities, has requested that all departments planning to schedule dances or picnics try to establish dates for the events as far in advance as possible. Due to the limited facilities in the area, early schedules will insure reservation of the most desirable party spots.

Hoop, Snorkel, Greens, Kegling Sports Featured

A round-up of recent NRC sporting events headlines basketball, Christmas tournament results, and skin-diving clubs.

BASKETBALL

NRC hoopsters — days, nights, and distaff—are currently in full tilt. The night shift basketball teams have started play in the County League at the Alondra Park gym. The three teams—El Segundo, Snarks, and the 89ers—play every Thursday morning at 9:45 am.

Day shift basketball teams play every Monday night at Fremont High School and every Thursday night at John Muir Junior High. Action starts at 6:30 p.m.

The ladies began competition in the County League last night—January 17—and play will continue each Tuesday night at 7:00 p.m. in the Alondra Park gymnasium.

GOLF

The first annual Christmas Golf Tournament held during the holidays at the Western Avenue Golf Club netted a low gross win for Reed Hays, while low net honors were taken by Clyde Christofferson.

BOWLING

NRC Christmas Bowling tournament results are as follows:

Men's teams — first, Cross Roads; second, Palmdale Rockets; third, First and Lasters. Women's teams — first, Quintesses; second, Funsters; third, Goofers. Mixed — first, Palm Trees; second, Hep Cats; third, Atomic Five.

Men's doubles — first, Badish and Coleman; second, Feucht and Hammer; third, Simpson and Causephol. Women's doubles—first, Schulke and Tully; second, Huston and King; third, McCarty and Brecher. Mixed—first, M. McCarty and B. McCarty; second, Adkison and Chamberlin; third, M. Howsare and W. Howsare.

First, second and third place awards—in that order—went to Bagby, McCarty, and Weiller in men's singles; Howsare, Brecher, and Coleman in women's singles; Weiller, McCarty and Klatt in men's all events; and to Howsare, Brecher, and Karr in women's all events.

Men's high scratch game honors were picked up by C. Lowe in first place with 241, followed by J. Fruscella with 232.

The women's high scratch featured M. Howsare with 220 and J. Ward at 216.

SKIN DIVING

NRC Skin Diving clubs will meet this month for year end awards. The day shift group will meet at the Cockatoo Restaurant at 7:30 p.m. on January 27 for their annual banquet and award presentation. Dan Blake, the "King of the Skin Divers" will be featured speaker for the event.

The night shift club will present their yearly awards at a 7:45 p.m. meeting in the NRC Clubhouse on January 28.

DONORS CALLED FOR JANUARY 31 BLOOD BANK DAY

Norcrafters in Plants One and Two will be making the first voluntary donations of 1956 to the Northrop Blood Bank on Tuesday, January 31, at the NRC Clubhouse.

Department clerks in those plants are handling the registration of volunteers; appointment cards will be returned to donors to indicate time of appointment. The Red Cross will furnish transportation to and from the Clubhouse.

During 1955, Personnel Activities and Services Administration has announced, over 1000 pints of blood were used from the bank, which is at the service of all Norcrafters and their immediate families. In addition to the almost incalculable life-saving benefit, the total represented a purely material saving of over $25,000 to Norcrafters.

NRC Ninth Art Exhibit Judges Pick Top Works

Final tabulation of credits by judges at Northrop's Ninth Annual Purchase Prize Art Exhibit totaled the following wins:

Bernie Niemeir won first prize of $100 for his Sea Gulls at Santa Monica; Theo T. Witsil, second, $75, for Still Life with Fruit; Gena Greayer—wife of Wesley Greayer—third, $50, for Boat Patterns.

The Sweepstakes trophy — awarded by popular vote of all Norcrafters — went to E. A. Schroeder for his Red Robe canvas.

Honorable mention ribbons were pinned to three of Bob Peck's paintings — Smoke Trees, Signal Hill Farm, and Our Home in Cody, Wyoming. Harold Pershing received two Honorable Mentions for Descanso Gardens and Silhouettes and S. A. Thompson's Modern Woman, Florence Gaulka's Grapes and Apples, and Desert Stop by Karl May also took HM ribbons.

In the Junior Division Ricky Lesnick, son of Ed Lesnick, won first place for Ebb Tide, while Fred Rash's two youngsters, Fred junior and Susie, took second and third places respectively for Yucca Plant and Sun and Moon.

Junior Division honorable mention ribbons were awarded to Steve Schroeder, son of Kay Tougou, for his Ballet Dancers canvas and to Billy Longworth, son of W. E. Longworth, for Jungle Paradise.

Judges for the contest included Charles Drogkamp, member of the California Art Club; Millard Sheets, head of L.A. County Art Institute; Frank L. Sandford, head of the scenic art department at MGM Studios and vice president of the California Art Club; Mary Lou Troke, teacher and director of Leuzinger High School Art department; Barbara Bellin, art instructor at Hawthorne High School.

TOP ARTISTS—. Winners of Ninth Annual Northrop Art Exhibit are pictured, left: Bernie Niemeir, first place; Joe Kalina, NRC Art commissioner; Gena Greayer, wife of Wesley Greayer, third; E. A. Schroeder, Sweepstakes winner; Theo T. Witsil, second; Ricky Lesnick, son of Ed Lesnick, first place Junior Division.

THE Northrop Scene BY DAY AND NIGHT

Scorpion Power Package

DURING PAST YEAR hundreds of thousands of Americans became better acquainted with Scorpion via displays, TV shorts, other communications arranged by Public Relations. Among exhibits was one shown in Allison Division display of General Motors Powerama late last summer in Chicago. Twin Allison engines were run up daily as demonstration to crowds of power packed into Scorpion.

PROMPT PAYMENT of insurance claims is goal of Group Insurance section, Personnel. Insurance Supervisor Bill Waldon is shown framed by typical stacks of drafts ready for signature. Section processes 700 to 750 claims per week involving over 1000 checks. The 1954 figure of 67,000 drafts was passed in November. (More insurance news in story, page 3.)

GREAT DAY—. Boat Club member Bob White, Engineering, is shown during initial launching of 20-foot gaff-rigged sloop which he built from keel up. Photo by Vic Lenon.

PROUD father of Tommy and Mary San Paolo, left, dance contest winners on many occasions, is Sam San Paolo, Sheet Metal layout man. Seven and six years old, respectively, Tom and Mary are known as "Wee Bops". They are shown cavorting before KHJ-TV cameras. (Picture by courtesy of KHJ-TV.)

Wise Owl Club Gains Member

FOR FUTURE SECRETARY—. Merl F. Sloan, director of student personnel, El Camino College, accepts scholarship award check from Northrop secretaries Isabelle Lowery (center) and Kay Cribbs. Money represents semi-annual National Secretaries Association International, Airborne Chapter, scholarship fund. Money will further studies of deserving student in business field. Several Norcrafters are in NSA.

"WISE OWL CLUB" at Northrop enrolled staunch new member in Arthur Gollwitzer, center, night drill press operator in Sheet Metal (5503), when safety glasses saved sight of his right eye. Convincing example of eye protection value is being discussed in photo by Woody Jones, assistant superintendent, nights, Production Fabrication; Gunnar Carlson, Sheet Metal department head; Gollwitzer; Hugh Zebarth, night foreman, 5503; and Chuck Zeller, superintendent, Production Fabrication. (For details of eye protection program and Wise Owl Club, see story on page two.) Gollwitzer is one of two first WOC members.

Northrop News

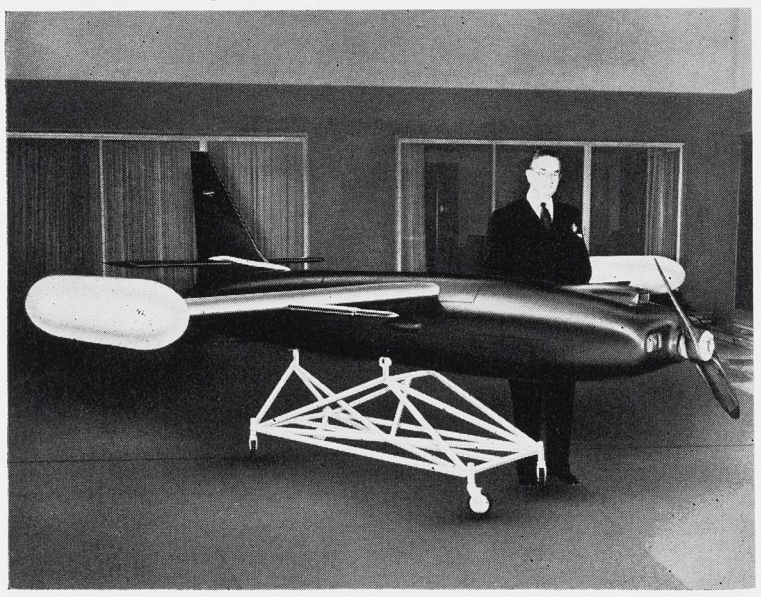
Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, February 1, 1956

$$$$ Million Saved!
(See page 2)

Scorpion Models
(See page 5)

AF EVALUATES LRI PROJECT

Radioplane Perfects New Multi-purpose '77 Drone



BUILD IT!—was the order given by Whitley C. Collins to pleased Radioplane folk, and on December 12, last month, the new plastic target drone RP-77 was unveiled at Van Nuys. Project proposal was by Radioplane men J. R. Jacobsen and Hank Campbell. The RP-77 is fitting climax to the company's fast-moving, company-financed development program. The drone easily exceeds all military requirements in its class.

A new radio-controlled plastic target drone developed as the result of an independent company-financed research project has been built by the Radioplane Company, it has been announced by Whitley C. Collins, president of Northrop and Radioplane.

Named the RP-77, the multi-purpose medium-speed drone will be constructed with new techniques using plastic material, and is designed for economical large-scale production. The new glass fiber construction methods were perfected by Radioplane in building the Air Force XQ-10, the first plastic pilotless aircraft.

The RP-77 is capable of speeds between 350 and 400 miles per hour in flights ranging from sea level to very high altitudes. It is designed for use principally as

(See RADIOPLANE, page 4)

Northrop Awards Vinnell Science Center Contracts

Northrop Aircraft has awarded contracts for construction of a new 250,000 square-foot engineering center and other facilities to Vinnell Company, Inc., of Alhambra, it was announced last week.

Total cost of all construction, equipment and supporting activities is estimated at $8,000,000. The new buildings are part of a long-range program to consolidate Northrop's facilities on a more efficient basis. (See Northrop News—December 21, 1955.)

The planning, architectural and engineering firm of Pereira and Luckman designed all buildings to be constructed for Northrop. In addition, the firm conducted several studies designed to provide a long-range facilities development program.

Largest structure to be erected by Vinnell is Northrop's new engineering building, consisting of two large floors and a six-story tower.

This air-conditioned building will house Northrop aeronautical

(See NORTHROP, page 2)

'DOZERS CREATE PARKING PINCH

Roaring bulldozers were at work last week uprooting steel mats and asphalt that formed paving for the parking lot adjacent to Plant Four. This is one of the many very necessary space reallocations that will take place before modernization completed.

Norcrafters felt the parking pinch immediately, but took the inconvenience in stride. The several hundred cars that had been accommodated in that area had to seek other locations.

Growth and growing pains always go together.

There was an immediate upswing in rides wanted and offered in the News' "Going My Way" columns. News ad phones are 2456 and 2732.

Norcrafters now average better than one and one half persons per car—one of the highest. During World War II and gas rationing, the average was slightly better than two and a half.

EVALUATING GROUP VISITS PLANTS OF LRI PHASE ONE COMPETITORS

Northrop's entry in the Air Force long range interceptor Phase One competition was under detailed study recently by the LRI Evaluation Group of the Air Force's Source Selection Board.

The Group was evaluating the progress and capabilities of the three companies which were awarded the Phase One contracts last summer — Northrop, North American, and Lockheed. Current objective of their evaluations is to narrow the competition to two companies.

The Evaluation Group, with Colonel C. G. Allen as chairman, examined all aspects of Northrop's LRI effort, including engineering progress, management capabilities, company facilities, and program planning. Similar surveys were scheduled for the competing firms.

Findings of the Group will be reported to the Source Selection Board, a joint Air Research and Development Command and Air Materiel Command committee. That Board, in turn, will forward them through Air Force channels to Headquarters, USAF, for a decision.

The Northrop meetings began on Monday, January 9, with company representatives presenting various aspects of their LRI capabilities.

Following these presentations, the survey team divided into sub-groups, with the Evaluation Group experts on different phases meeting with their Northrop counterparts to investigate the LRI plans in detail. This detailed study continued until the conclusion of the survey January 11.

The visiting Air Force team represented a cross-section of experts on the LRI program, and included both civilian and service personnel.

From Air Research and Development Command there were the following representatives: Colonel C. G. Allen (chairman), Captain E. C. Freeman, Ralph Reinhardt, Joe Flatt, Henry Wells, Mr. Trenary, Major Bartlett, J. Burke, H. Schisler, J. M. Christensen, George Yingling, and Captain Hal L. FitzPatrick.

Air Materiel Command members of the survey team were—Colonel B. C. Downs, P. Wilbor, P. Howe, E. Schuessler, J. Bailey, K. Rockwell, Dr. E. Mereness, P. Engle, B. Wilcox, Major P. Stanch, Mr. Jameson, Charles R. Rush, jr., and Francis L. Nosker.

Major J. R. Lindgren represented Ogden; L. Clarkson the Sacramento Air Materiel Area; E. H. Gale the Mobile AMA; and H. P. Martoli the San Antonio AMA.

Brigadier General Clyde R. Mitchell, AMC; Brigadier General H. H. Estes, jr., ARDC; and Colonel Carl F. Damberg, Hq. AMC, attended the initial survey briefing.

Lieutenant Colonel C. W. Tennant, Air Force plant representative at Northrop, attended the meetings in his official capacity, extending the facilities of his office to USAF officers and civilians on the visiting board.

The company presentations which opened the meeting were made on a precision schedule, with concise, five- and ten-minute talks predominating.

Vice-president John R. Alison, Customer Relations, acted as chairman of the Northrop program, and welcomed the Evaluation Group.

President Whitley C. Collins' brief presentation on corporate management and its capability highlighted the high caliber of Northrop people; the outstanding record of effective F-89 production; sound Company financial status; and the friendly human relations atmosphere at Northrop.

"We are confident that we can furnish the United States Air Force the most effective long range interceptor weapon system in the shortest time and at the minimum cost," the presentation emphasized.

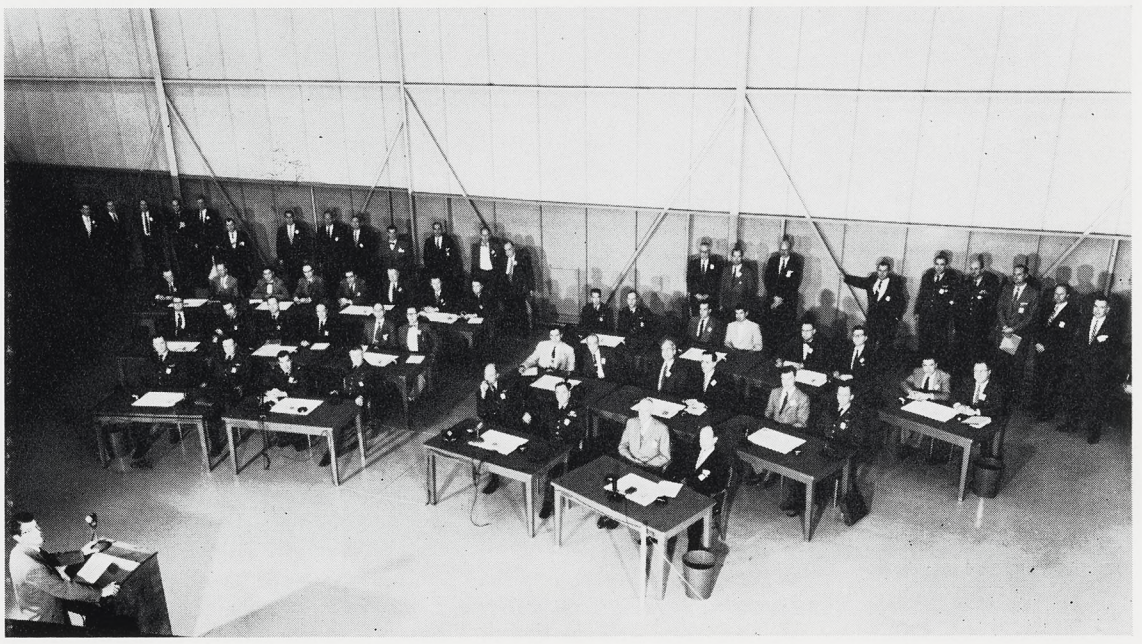
Vice-presidents Alison, Edgar Schmued, and Kenneth P. Bowen reviewed the characteristics of the Customer Relations, Engineering, and Manufacturing divisions; with presentations on Northrop Quality Control and Flight department organization and methods by R. S. Catlin and Max Stanley, respectively.

Various Engineering phases of the Northrop LRI were discussed thoroughly by Dr. William F. Ballhaus, Welko Gasich, H. K. Weiss, and Ray Gardner. The latter is LRI weapon system project engineer.

Tom McCarthy, chief, Manufacturing Operations Analysis, outlined schedule and manpower plans; Hugo Pink, Experimental Flight Test chief, spoke on proposed test programs; and Ed Petoskey, director of Corporate Planning, showed the long range facility plan of the company to the survey team.

Cost summaries on the LRI, presented by Al C. Morgan, director of Customer Relations, concluded the initial presentations, and the meeting moved to Plant Three. Here, after an outline by Project Engineer Gardner, the survey team separated into the sub-groups by specific functions to go into details with the Northrop representatives.

LRI EVALUATION GROUP and Northrop representatives listen to description of Northrop LRI entry given by Ray Gardner, left foreground, LRI weapon system project engineer. Afterward the group separated into sub-groups according to functions, with Evaluation Group experts meeting with Northrop counterparts.



MILLION SAVINGS

SALVAGE, RECLAMATION BECOME BIG BUSINESS

Northrop Salvage and Reclamation operations last year graduated into the near-million dollar business class, as these twin Conservation activities purposefully and efficiently went about proving the "great oaks from little acorns" adage in a vast way.

Operating as a segment of Industrial and Plant Engineering, the Salvage department sold generated scrap to the value of over $400,000; and the Reclamation department reclaimed for use in the plants other scrap and surplus material amounting to more than half a million dollars!

The monetary value of the savings is only one section of the operations. Value cannot be estimated of contributions to production and test efforts, among others, made possible by the availability of materials not otherwise obtainable on the spur of the moment.

There are, inevitably, great amounts of scrap generated by operations as sizable as those at Northrop. A great deal of it must be disposed of by the most economical means as rubbish.

But in the remaining scrap there is often great value—when it is properly segregated.

By far the larger part of the scrap sales figure comes from items quite common to every shop Norcrafter — the chips, borings, pieces of tubing, and odd lenths of extrusions that are by-products of production machining operations.

Segregated into proper bins, each containing only one kind of scrap, these chips and shavings and borings become the objects of bidding by outside vendors on a quarterly basis. The widespread use of aluminum in aircraft manufacture makes this metal the single largest source of scrap revenue.

But there are materials of less common use that contribute to the large yearly total, among them items like discarded tab cards — almost 300,000 pounds in 1955 — worn-out fluorescent lighting tubes; used 50-gallon drums; and discarded battery plates.

In the field of reclamation lumber leads the way, with all of the reclaimed lumber, Mat Con reps point out, having already served the use for which it was originally bought.

There are numerous small parts, sheet stock, tubing, and wire that live for use another day through the efforts of Reclamation. Much of it comes from assemblies which may have been scrapped or rejected, but whose components are perfectly good.

None of the reclaimed material is used in airborne equipment.

As a result of the reclamation activities—and encouragement of their use by Factory personnel under Factory Manager C. B. Spencer—an increasing number of departments have discovered that Salvage and Reclamation are not merely collection agencies, but service departments as well. Materials are often available for projects which do not require purchase or use of extensive quantities.

Engineers, for example, have made use of reclaimed parts in building test equipment, rather than specifying purchase of new — and sometimes hard to get — materials.

Producibility has used reclaimed material for making manufacturing aids ("gadgets"). And the Paint Shop and Standard Tooling frequently check in at Reclamation to see if usable equipment is available.

More departments are expected to discover the convenient service that contributes directly to dollar savings. Assistant Factory Manager John Breneman, nights, expects to arrange supervisory familiarization tours of the Reclamation area this year in his capacity as chairman of the Safety-Conservation general committee.

During the year, too, it is planned that material requisitions will be routed through Salvage to discover if required materials might not be on hand without purchase.

With the further widespread use of reclaimed materials apparent, Norcrafters will be able to contribute even more to the concept of "more Air Force per dollar".

GOOD HOUSEKEEPING is apparent in Reclamation area with bins of various fittings reclaimed from otherwise disposable material. Howard Boyce, standing, and Lawrence W. Mooren are shown taking stock inventory.

NEATLY SEGREGATED into bins, various metal scraps are kept until truckload is assured. Then vendor who has successfully bid for the scrap sends truck to collect it. Operator of the fork lift is Frank Koska, Reclamation department.

Palmdale Section

FOLLOW-UP to Palmdale final assembly line photos (see Northrop News, January 18, 1956) shows power being packed into nearly-completed Scorpion, as Leadman J. E Peters, left, and R. C. Taylor guide one of the twin Allison engines into its bay in the F-89H airplane.

NINETY-FIVE DOLLARS were pocketed by Palmdale Maintenance electrician Dwight Clark, right, for his pay-off Suggestion Award plan idea involving improved ground plug assembly. Handing over check—Tom McCracken, base administrator; Dwight's foreman, Harold Miller; and Dick Carroll, Palmdale Industrial Relations manager. Chuck Beauchat is Suggestion Award plan contact at Palmdale base.

Northrop Awards...

(Continued from Page 1)

and scientific personnel devoted to the advancement of company programs in electronics, optics, guidance systems for unmanned aircraft and other precision equipment.

Pereira and Luckman has created a basic module design for Northrop's research center using modular partitions, wiring and floor slabs as standard equipment. Structure will be constructed of steel, concrete, aluminum and glass.

Other Northrop facilities to be constructed by Vinnell simultaneously with the science center are an engineering test laboratory and a new cafeteria.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 11

Published every other Wednesday by
INDUSTRIAL RELATIONS DIVISION, NORTHROP AIRCRAFT, INC.
JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

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News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — noon Wednesday one week before publication.

FOR SALE

HOUSE, 4-bedroom, 1 and ¾ bath, 2 wall panel gas heaters, garbage disposal, attached garage, block fence, Palmdale. JERRY WESTMORELAND. Write to Northrop News, Box 1117. A

HOUSE, 2 bedroom, frame, 50'x120' lot, $1500 down, balance $4500, payments $52 month, 9 miles from Northrop. R. C. EDWARDS, TE 5-4886. A

HEARING AID, Microtone, used one month, original price $237, $50. WILMA MOUNTS, OR 1-2722. A

MOTORCYCLE, F-B 200 C.C., swing arm frame, $240. R. W. KING, GR 7-1937. A

LAND, 11/10 acres, near Riverside, homesite, room for chickens, low down and monthly payments. LEO W. DAY. Write to Northrop News, Box 1114. A

ELECTRIC RANGE, Crosley dbl. oven deluxe push button control, automatic timer, $250 take $50 dn., monthly payments. LESLIE GREER, FR 2-3452. A

NORGE FREEZER, 11 cu. ft., $275 cash. Cost $450, holds 350 lbs., upright, one year use. W. N. LEWIS JR. Write to Northrop News, Box 1113. A

DRIER, Whirlpool Supreme, used two months, perfect condition, $180. ANN OLIVIERI, FR 4-6013. A

ELECTRIC IRON, Proctor, nearly new, $5; U-Ni-Matic #12 gas WALL HEATER, 4,000 BTU per radiant, 3 radiant, $3; VENETIAN BLINDS, aluminum ivory, 4-47"x52"long, 3-35"x50" long, 1-61"x50" long, 1-29"x35" long, $5 for entire lot; 6" post hole AUGER, $2. BLANCHE E. RUNSWICK, OR 7-3514. A

BOAT ENGINE, '41 Merc., converted 12 degree, 4 barrel Offie manifold, water cooled exhausts. R. K. GADD, TO 9-0140. A

GOLF CLUBS, Wilson, six irons, two woods, canvas bag, good condition, $30. OR 4-6419 after 4 p.m. A

CHEVROLET 1941 Coupe, hard top, 1956 license plates on car. HARRY A. PHILIPP, OR 7-1540. A

AUTO BATTERY, from '49 Ford, $4, Oldsmobile RADIO, push button type, $10. Write to Northrop News, Box 1112. A

ENGLISH BICYCLE, man's lightweight, hand and foot brakes, $17.50 or best offer. OR 8-8305. A

FREEZER, 11' International, three years old, chest type, good cond., $125. LEROY GWALTNEY, DA 9-3040. A

HOUSE TRAILER, 27', dinette, bath, fully equipped, tandem wheels and dolly. SYLVIA B. BARTOLOMUCCI. Write to Northrop News, Box 1111. A

FORD, '53 Club Coupe, 6, overdrive, 4 new white walls, semi-customized body, $1200. RON WEESNER, PL 9-1368. A

GERMAN SHEPHERD PUPPIES, good stock. W. C. FRANTZ, DA 4-0100. A

CHEVROLET, 1937 coupe, $20. M. M. WALKER, FR 7-1732. A

CHROME SET, grey, 4 chairs, Virtue Bros., $50. HELEN WHITE, OR 2-7074. A

VIEW CAMERA, 4x5, box only, mahogany frame, extension bellows and track, lens board never cut, camera used five times. $25. R. E. KNOWLES, FR 2-9365.

TROPICAL FISH AQUARIUM, 10 gal., S. S. Pemco: 5 gal., S. S. Blaise, ½ hoods, outside filters, stainless steel stand for 10 gal. Pemco, sell all or part, make offer. BOB REED TE 4-8215. A

UTILITY TRAILER, dump bed, car hitch safety chains, $40. D. R. HICKS, LU 7-4443. A

M-G TD, 1953, new top, $1300 or offer. CHARLES GOODSON. Write to Northrop News, Box 1110. A

COLONIAL CHAIR, hand carved front legs, plain back, floral design, $65. A. SOUTHWORTH, PL 9-3994. A

FORD PARTS, V-8, H & C, ¾ race cam, 1932-1948, $12; flywheel, 21 lbs., 1932-1948, 9" or 10" clutch, $8; set of Johnson adjustable tappets, $8; extra capacity radiator, 1941-1948, $18; short block, 24 stud, 1938, needs rebuilding, $10. Will sell lot for $50 & include large box of useful parts free. ARTHUR ECK, DA 9-3739. A

BATHROOM SET, like new, complete; 30 gal. Rheem HOT WATER HEATER, slightly used; large WATER SOFTENER, used about 6 months. H. E. ROSS, OX 7-3763. A

UTILITY TRAILER, 2-wheel, tarpaulin and trailer hitch, $20. OR 2-7806. A

HOUSE, 5 room, 2 bedrooms, close to Northrop, lot 135'x50', built-in breakfast nook, double garage, $11,000; LA SALLE, 1930 4-dr. sedan, $295; 1949 KAISER sedan 4-door, $100; RADIO out of '49 Kaiser, make offer. MACK E. MORGAN, PL 4-1078 or PL 6-4513. A

KITCHEN CABINETS, linen closet fronts; cast iron SINK and BATHTUB; TABLE; swivel DESK CHAIR; Silvertone console RADIO, make offer. HARRY ALLEN, OS 6-8842. A

HOUSE, in Palmdale, 3 bedroom, 2 years old, cinder block fence, air conditioned, interest 4¼% FHA, payments $65 month, full price $11,000. Write to Northrop News, Box 1108. A

DIVAN Kroehler, with slip cover, good condition. DA 9-5605. A

ROLLEIFLEX camera, F/3.5 Zeiss Tessar lens, $85; Nikkor (Leica) F/2.0, 85 mm LENS with viewfinder, lens shade, cases, $100. J. J. MIYATA, AN 3-8534. A

CAR BATTERY, Goodyear long narrow type for Buick, Olds, and Pontiac, 2 months old, with battery cables, $10. E. G. WOLLESON, FR 4-7204. A

BUICK, 1955 Century convertible, full power equipment. ST 9-1744. A

WASHING MACHINE, 5 years old, wringer type with automatic timer, White Way, $20. M. A. BALDWIN, DA 4-7019. A

FORD, 1954 club coupe, Fordomatic 6. FR 4-4515. A

MOTORCYCLE, 1948, 500 c.c., Triumph Speed Twin, $200. REG DARLEY, FR 5-6001. A

DAVENPORT and CHAIR, dark red upholstery, $100. H. E. SHULTZ, RI 7-1194. A

MATTRESS, Simmons Beautyrest, $80 new, $30; 6 complete sets of girl's UNIFORMS from Hawthorne Christian School. Blouses & skirts. Sizes 6 & 8. M. K. THURNEAU FR 9-0552. A

SOFA AND CHAIR, overstuffed, mahogany, slip covers, $35. W. M. FRANKUM, FR 9-1309. A

MOTORCYCLE, B.S.A., 1954 Gold Star, 1956 plates, all equipment, swing arm frame, $550 cash or take older cycle for part payment. L. S. ANTHONY. Write to Northrop News, Box 1107. A

DINETTE SET, chrome, $40; oval table, 54"x36", gray Formica, 4 green chairs. LEONA KOPPOLD, DA 9-3139. A

G.M.A.C. ENGINE, block bored out 3 29/32, reground crankshaft, aluminum pistons, hasn't been assembled, $75. GERALD THOMPSON, OS 6-1340, between 4:00 and 5:00 p.m. A

CHAIN LINK GATE, galvanized, 2 steel posts and fittings, 40" post to post outside meas., $7.50; CLOTHES LINE POST with end fittings, $4; 26" boy's BIKE, $5, PL 4-7810. A

ACCORDION, 120 bass, Nobility, like new, cost $400, sacrifice, $175. JOE SCHORLE, OR 1-2058. A

STENOTYPE MACHINE, like new; TRIPOD and carrying case; BICYCLE, 22", boy's; SKI BOOTS, size 3. W. E. FRIESZ, KI 2-0688. A

PORTABLE WELDER, 300 AMP; DeSoto engine, new radiator and battery, like new performance, $350. RALPH MURANE, KEystone 5-7332. A

KITCHEN BAR drawers, shelves built in, seats 5, $25; SIGN PAINTER'S SET, with stencils, $20; blonde mahogany DINING TABLE, seats 10, $40; SLIDING DOOR, redwood, and track, 7' high, 10' wide $15. FR 4-3253. A

HOUSE TRAILER, made from bus body, spare tires, make offer. C. H. MARTIN, OS 6-2831. A

CAMERA Cannon IV SB (1/1000 second shutter), flash attachment, case, close up lens, tripod, 5 months old, $200. S. L. ROSE, EA 2-3884, after 6 p.m. A

LA SALLE, 1940 convertible, make offer. HO 2-7654 or NO 2-5282. A

CHRYSLER, '41 6 coupe, '56 lic., $60. STAN RYAN, GA 9-2764. A

OLDSMOBILE, '54 Super "88", 4-door; CHEST & WARDROBE and CRIB, $25. HENRY C. SEVERSON, OR 6-3633. A

TRAILER, 4x7x3½ ft. metal, covered, camping or utility, best offer. TE 3-4307 after 7 p.m. A

FORD, 1954 V-8 custom ranch wagon, Fordomatic, $1900; '49 OLDS conv., $275; SEWING MACHINE, Kenmore cabinet style, $60. L. W. RICHIE, LIberty 8-4321. A

CHEVROLET, 1956 Bel-Air V-8 convertible, Power Glide, power brakes, $2700 or offer. SU 3-7087 after 5:00 p.m. A

SEWING MACHINE, Singer, works fine, treadle type, $15; Speed Queen WASHING MACHINE, good cond. $22.50. Write to Northrop News, Box 1103. A

PLYMOUTH, 1950, 4-door sedan, $325 or best offer. DAN ROKOS, HO 7-8882 or HO 3-7305. A

SEWING MACHINE, Kenmore portable, terms if desired, $50. E. BURDA, TO 2-9547 A

IRONER G.E. flatplate $50. B. P. BRADY, OX 3-3060. A

BICYCLE, boy's, 26", lightweight, 3-speed, hand brakes, A-1 condition. PL 2-9597. A

HOLLYWOOD BED, ¾ size, without headboard, good condition, $35 or make offer. TONI LUND, DA 9-6021. A

UPRIGHT PIANO, Smith & Barnes, good condition, $50. H. B. WATERMAN, WE 5-6824. A

SADDLE, Western Stock, Baird make, 2 years old, cost $250, $150; HORSE, lady's, dark bay gelding, black points, blue ribbon winner at shows. $150. FR 4-8158. A

WILLYS, 1940 4-door sedan, $30; two ¼ h.p. ELECTRIC MOTORS, $5 each. ME 3-0849, call after 5 p.m. A

TYPEWRITER, Royal Silent portable, $40; CAMERA, Revere, 16mm, $60. PL 8-2818 eves. A

AMPLIFIER, Masco, 40 watt output, 9 tubes, 2 mike hookup, $35. RICHARD LONG, OS 6-6637. A

ACCORDIANA, practically new, 120 bass, Excelsior model 305, sacrifice, $175. ORchard 2-2390 days, PLeasant 2-1006 eves. A

LUGER, 9mm, with holster, 1 box ammo., very good condition, $30. G. SCHULTZE. Write to Northrop News, Box 1102. A

HEARING AID, Zenith, $60; WHEEL CHAIR, $50. OSCAR CHAMPION. Write to Northrop News, Box 1101. A

SPRAY OUTFIT Sears diaphragm compressor hose and quart spray gun, $35, cost $80; Toro 21" POWER MOWER, 3 years old, $70. R. LE VESQUE, EX 7-3004 A

SAM BROWNE BELT, officer's, dark brown leather, best quality, two shoulder straps, ammo pouch, saber chain, $6. R. E. KNOWLES, FR 2-9365. A

HEATHKIT Audio Amplifier A-9B, Jensen 15"; Jensen 15" Hi-Fi SPEAKER; Jensen 15" HORN, $95. DALE CROTHERS, TO 9-2985. A

HOUSE TRAILER, 1947 Spartan, 26 ft., w/awning; clean, aluminum exterior, riveted structure, $700. D. W. WELLS. Write to Northrop News, Box 1127. A

SHOPSMITH, model Mark 5, all attachments, Jointer, Jigsaw, Wood Chisels, Turning Chisels, $435. WILLIAM PEDERSEN. Write to Northrop News, Box 1124. A

HOUSE TRAILER, 1953 Supreme Deluxe, 31 ft., 2-bedroom, $2395. Terms or cash. W. H. BRAMSON, GA 1-6552. A

WELDING TANK & ATTACHMENTS, Prestolite, $22.50; Small Heavy Duty TRICYCLE, $4.50; RIDE TRACTOR, plow, Harrow, Disc and Scraper, like new, 7½ H.P. motor, $275. HAROLD L. BENNETT. Write to Northrop News, Box 1121. A

CHEV., 1942 2-door sedan, 1949 engine, $125. HARRY WILLARD McFARLIN, OR 7-9450. A

RECEIVER AND MATCHING SPEAKER, Hammarlund HQ 129X, with Xtal calibrator, $165; Heathkit vacuum tube VOLTMETER, $23; complete MOBILE STATION including Super Six Converter, Stancor transmitter, dynamotor, mike, antenna, harness, $85; all purpose auto broadcast RECEIVER, $5. V. D. WESTPAUL, FR 5-8314. A

BED, Box Springs, Mattress, Twin size, perfect condition, $30; Platform ROCKER, $5; T.V. Swivel TABLE, $5. J. E. CRANE, GA 1-5431. A

HOME, in Pacific Palisades, 2-bedrooms, w/w carpeting, drapes, fenced yard, double garage, near schools and shopping; small BAR $5; BEER MUGS (8), songs on each, liquor glasses (8); His-Her COCKTAIL SET 2 individual glasses, stirring sticks, 1 large cocktail mixer, stirring stick large cocktail mixer with leather band, cost $25, all for $10; PAJAMAS Japanese complete set—pajamas, robe & slippers. Ladies 9, $2.50 each; RUG PAD, wool 30'x13', $25. XENIA G. YOUNG, EX 3-5529. A

SPEED BOAT, 16 ft., ¾" mahogany planking, V-8 Merc. eng., run 17 hrs., plus trailer, $495. M. A. LaMARSNA, ME 3-5789 between 6 and 9 p.m. A

MERCURY, '51 Mercomatic, 2-door, nosed, decked lowered. DA 4-6970 after 6:00 p.m. NICKI BOYER. A

HOME, 3-bedroom, 2 bath, in Torrance, $2500 down, $97.64 per month, $17,800 full price, w/w carpeting, fenced, two car garage, beamed ceiling, near shopping and schools. ERNEST WECKBAUGH. OS 6-0758. A

DEEP FREEZE, 21½ cu. ft. chest; Sears chemical TOILET, for house trailer, sterilized, 3 mos. old; Birk-loc contour CHAIR, green plastic. OS 5-7993. A

CAMERA, 3¼x4¼ Super D Graflex, 6" Ektar automatic lens, flash synchronized, roll film adapter, six cut film holders, film pack adapter, outfit complete for $135 cash. ORchard 7-7890. A

STUDEBAKER Champion 1947 2-door, overdrive, 1956 license, good condition, $160. RICHARD D. HIRDLER, HE 4-5405. A

DINING ROOM SUITE, Walnut, good, 5 chairs, upholstered seats, 1 table with leaves, 1 buffet 58", $25. HAZEL STEWART, OR 2-8650. A

PICK-UP TRUCK, 1950 Chevy Sportsman camping cab, motor just overhauled, $650; SAW FILING MACHINE, Beaver, used little $250. EVELYN HAMMOND, FR 4-8049 evenings. A

DINETTE SET, chrome, 2 extra leaves, 6 matching chairs, foam rubber seats & backs, $95. F. E. BURFORD, DAvis 3-0634 evenings. A

HOUSE, 3-bedroom, G.I., 4 yrs. old, patio, 2-car garage, near schools, Manhattan Beach, $13,500, easy terms. MICHAEL P. BALS, FR 2-0737 after 5 p.m. A

HIGH CHAIR, $2.50; BUGGY-CAR BED combination, $10; BATHINETTE (Trimble), $2; Toilet TRAINING SEAT, $1; PLAYPEN, usable $1.50. R. A. MAGIN, PL 3-8950. A

MOTORCYCLE, 1954 "DOT," recently rebuilt, good, in street condition. Best offer over $275, cash. H. D. CARPER, OR 4-5914 after 6:15 p.m. A

BOAT AND TRAILER, 14 ft., 16 H.P. Mercury outboard, remote controls, windshield, $650. JERRY COWDELL, DA 4-1813. A

DINETTE SET, modern walnut, expandable table, 6 chairs and buffet; children's TWIN BED set, mattresses and dressers; two 3-way FLOOR LAMPS; 2 chrome kitchen CHAIRS; plastic covered occasional CHAIR; Philco RADIO and PHONOGRAPH console, entire lot $115, or will sell separately. G. T. STERLING, OS 6-3713. A

DODGE, ½ ton panel, '47. Equipped for camping, good condition, $200. J. W. KETCHUM, OR 1-5279. A

DE SOTO, 1948 deluxe custom sedan. DAvis 9-4931 or DAvis 3-1317. A

STEEL GUITAR, electric, Magnatone deluxe, amplifier, music rack. $100. MILDRED DELGADO, AD 4-1691. A

FORD, 1950 "6" with overdrive, maroon. $299. JOHN N. EDWARDS. Write to Northrop News Box 1122. A

RADIO, table model, new, played once, Packard-Bell. $18.50. G. L. HANCOCK, OR 1-1720. A

CHEV., '48 4-door sedan, $150. C. C. ADAMS, DA 9-5804. A

PIANO mahogany upright. DA 9-6765. A

DOG, English Springer Spaniel, 4 yrs. old, trained to hunt small game, $100. WILLIAM L. MEEK, OS 6-8118. A

BABY BUGGY, $18. G. H. ANDERSON, OS 5-2880. A

BOAT, 12 ft. runabout, trailer, 4-cyl. outboard motor, $295; MOTORCYCLE, 1952 Harley 125, $175. SAMUEL J. RAYMOND, EX 7-5938. A

SPORT SUIT, boys, size 12, worn 3 times $15; 16" Hallicrafter TV table model, $50; 16 cu. ft. FREEZER, good shape. $75. DONALD CARLBERG, OS 6-4752. A

PROJECTOR, 8mm Keystone & CAMERA with cases, $135. S. W. JOHNSON, PL 4-2504. A

DINETTE SET chrome, $25; SOFA, chair, $35; STOVE $10; REFRIGERATOR, $35; TWIN BED box and inner spring mattress, $20. OS 6-6093. A

TRAILER, 1-wheel Montgomery Ward. SHIG OKADA, RE 2-9259. A

REFRIGERATOR, Hotpoint, 6-ft., best offer. PL 9-5719. A

PRESSURE COOKER, Presto, model 400, $15. ROY A. BALLING, VE 9-7378. A

MERCURY, 1949, extras, must sell, best offer. REGGIE ARAKAWA, RI 7-2474. A

FRIGIDAIRE, 6 cu. ft.; 15 cu. ft. upright FREEZER sell reasonable. E. R. JUDGE, EA 2-2292. A

BOWLING BALL, woman's 14 lb., Brunswick, $10. HERB WONG, FAculty 1-2583. A

CHROME SET, Douglas, yellow, 6 chairs, cost $150, will sell for $70; HOT PLATE, Dominion, 2-burner, three speed control, excellent condition, $8. MICHAEL C. ROMANO, FR 2-8019. A

HINGE for overhead double garage door, $10. W. W. KELLY, PL 4-9637. A

BICYCLE, boy's 20", two speed shift, $15. R. W. FEENY, EA 2-0646. A

LOT, Lake Elizabeth, 60x158', paved road, water & elec, $1500, private club. L. A. DRAZIN, WHitehall 2-4951 (Lancaster). A

RIFLE, 8mm Mauser, excellent condition, $35, including 20 rounds of ammo. A. J. STEWART, JR. Write to Northrop News Box 1129. A

KAISER, 1952 Hydra-Matic, must sell, $425. L. J. GREEN, OS 6-9479. A

MENS' TOPCOATS, one 36 regular and one 38 regular; 62 pc. quadruple plated SILVERWARE SET, best offers. Call FRontier 5-9885 evenings and weekends. A

FORD, 1932 coupe, full race Mercury engine, make offer. J. D. McCLEARY, OS 5-4967. A

CHEVROLET, 1950 coupe, $350. E. A. GRISWOLD, FR 2-4737. A

TRAILER HOUSE, 25', completely redecorated, near new stove, refrigerator, $600, includes awning, redwood planter fence. FR 4-9280 between 10 a.m. and 2 p.m. J. A. BLACK. A

RUGS 9x12, oriental $15 each; END TABLES and matching coffee table, blonde, will sell as set or separate, $40 complete or $10 per end table and $20 for coffee table. R. D. MILES, PL 3-9847. A

MIRROR, 36"x48", beveled edge, $30. M. SETZER, OS 6-8315. A

ELECTRONIC TEST EQUIPMENT, five Heathkits & one Triplett, will sacrifice for $135, good condition. DAvis 4-8177.

CHEVROLET 1950 deluxe 4-door, $450. D. E. KAEDING, AX 1-4648. A

HAY MOWER, 6', overhauled, two sickles with new knives included, $35. TE 3-3968. A

FORD, Model A, mechanically good, and seal-beam headlights. $65. LEON J. MILLER, PL 6-5641 after 4 p.m. A

BOAT TRAILER, accommodates 10' to 14' boat and up to 6' beam, safety chain, all steel welded, $60. H. A. ZILLMAN, OS 6-7531 after 10 a.m. A

MOTORCYCLES, 1951 BSA, B-34, 1956 plates, $295; 1951 James 200, 1956 plates, $150. HELEN WHITE, OR 2-7074.

HOUSE, stucco, three bedroom, three years old, near school and markets, large lot, full price $8950, will sell for $50 down and $25 per week, or other terms to suit buyer. Call TErminal 4-7305. A

RIFLE, Remington, model 550-A, 22 semi-automatic, short, long and long rifle, good condition, $30. AX 2-8455. A

TABLE LAMPS— 2 matching red, $2.50 each; T.V. TABLE, dark mahogany, swivel top, $5. D. J. QUINLAN, FR 5-3149. A

HOUSE—, 2-bedroom, tract, near Northrop, furnished, garage, $8950 or make offer. Financing can be arranged. M. M. HUNT, DU 4-6121. A

MERCURY, 1955 Monterey, Mercomatic, 4 door sedan, desire $500 equity, take over payments $94 per month for 20 months. MRS. A. K. MILES, CH 9-8854. A

FREEZER, 18-foot Sub-zero upright, like new, make offer. NAOMA CLARK, OS 6-6422, after 4 p.m. A

MOTORCYCLE, '52 BSA 30.5, new tires and engine overhaul, $300. R. L. STAHL, DA 6-7877, after 5 p.m. A

MUSIC STANDS, 10, dance orchestra type, excellent, $2.50 each, cost $6. PL 6-3359. A

BINOCULARS, 7x35, individual focus, with case, ordered in error. Never used, $22. G. SCHULTZE. Write to Northrop News, Box 1118. A

AQUARIUMS, 2 tropical fish, 5 and 50 gal. (50 gal. incomplete), Marvel model "C" pump, vibrator pump, filter heaters, thermostat, $60. F. M. ROSENSTIEL, NE 2-7610. A

T.V., 17" Gen. Elect. console, A1, $65; small Acousticon HEARING AID, with guarantee, cost $245, $113; SHOW CASE, $10; IRON, $3; '39 BUICK, '51 motor, safety tubes, $85; apt. size GAS REFRIGERATOR, $35. FR 2-9051. A

WANTED TO BUY

RACING IGNITION for 1950 thru 1953 Mercury. WILLIAM CICERONE, PL 2-9486.

SLIDE RULE, log log duplex. C. T. DORSETT. Write to Northrop News, Box 1105. B

PICK-UP BODY, stock or channeled, maximum, $10. FR 4-3253. B

SLIDE RULE, log log, for college student. HARRY KLINE, PL 9-6332. B

LINGUAPHONE COURSES in German and Italian. Must be in good condition, complete. OR 1-6460. B

WOOD WORKING MACHINERY, reasonable. Write to Northrop News, Box 1109. B

TROPICAL FISH AQUARIUM, at least 25 gal., must be in good condition. BOB REED, TE 4-8215. B

SKI BOOTS, size 10½; SKI POLES; SKIS, 6 ft. 9 in. DA 3-2004. B

IDEALS PUBLICATIONS, past issues. OS 5-7878. B

MANUAL, shop owners for 1950 Olds "88." State price and condition. N. T. DIMITRY. Write to Northrop News, Box 1130 B

TRAIN, American Flyer model, rolling stock and accessories, give price and description. Write to Northrop News, Box 1120. B

LOT, Malibu, Pacific Palisades or Mulholland area, up to one acre. Under $6500. XENIA G. YOUNG, EXbrook 3-5529. B

DRESSER, mahogany with mirror, in good condition. DA 4-3400. B

FISH TANK, 15-gallon, tropical, used but A-1. S. S. HOPWOOD, GL 4-2855.

MOVIE CAMERA, 16mm Bell and Howell 70DA or DL, appearance not important, must be reasonable. JOHN M. HAGAN. Write to Northrop News, Box 1119. B

WASHER, Bendix, bolt down type, need not be working condition round or square type. RAY GRISH, FR 2-4673. B

FOR TRADE

ELECTRIC MOTOR, ½ h.p., 3450 rpm., will trade for half horse or larger motor with 1750 or slower rpm., will pay difference. C. M. CALLAWAY, OS 5-6016.

RADIO EQUIPMENT worth $150, including test equip., trade for good shotgun, 20 or 12 gauge, pump or double. DAVID L. YOUNG, OR 4-4136. C

T.D., $1100, trade for vacant lot. FR 4-3253. C

TRADE Equity on 3-bdrm hse. Lancaster area near shopping center and aircraft for clear lot or equity in 3-bdrm. hse. in Gardena, Torrance, Lomita, Walteria area. LILA G. CANNON. Write to Northrop News, Box 1125. C

RESIDENTIAL LOTS, 4 large, 7 miles west of Palmdale Airport. Will trade for Los Angeles Property. E. M. MOODY. Write to Northrop News, Box 1123. C

(See BBSF, page 4)

AT YOUR CREDIT UNION

AUTOMOBILE LOANS are again in effect. Norcrafters with at least two years of continuous service can finance new car purchases, or re-finance older ones, re-paying by the easy payroll deduction method.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

"GMW" ads are run for one time only. If you wish the ad repeated, please fill out another form and forward to the News Office.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 5)
CARSON & STUDEBAKER RD., Long Beach, Lakewood dist.). (Can take two riders anywhere in Bellflower south of Compton Blvd., and north of South St.). EDWARD D. DENNIS (5534-21449, Ext. 2241, 2244). 12-5

7:30 a.m. — 4:15 p.m.

(Zone 12)
MONTANA AVE. & 11TH ST., Santa Monica (Montana to Ocean Ave.; South, to El Segundo Blvd.; East to Bldg. I, & return. Am interested in car pool). HAROLD L. FAIRCHILD (8620-12150, Ext. 1795). EX 5-0575). 13-12

(Zone 14)
CRENSHAW & SLAUSON or Crenshaw & Vernon, Windsor Hills. SIDNEY R. OLDIS (5128-14408 Ext. 1929), AX 3-4449.

4:45 p.m. — 1:15 a.m.

(Zone 2)
MANCHESTER AVE. & WESTERN AVE., Los Angeles (44). (2 riders wanted). MARVIN J. LAPICOLA (9340-42984, Ext. 2264). PL 9-5021. 18-2

HOOVER & FLORENCE, Los Angeles. (Down Central to Imperial to Crenshaw to Broadway to plant one). DAVID R. HICKS (5583-42509, Ext. 2097). LU 7-4443. 18-2

MAIN & FLORENCE, Los Angeles. (Offering rides to 5 besides myself. Riders pay gas if enough riders—if not over three will charge accordingly). GERALD R. SIMMONS (9330-42981. Ext. 2228). 18-2

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 1)
NORMANDIE AVE. & SANTA BARBARA, Los Angeles (37). EDWIN C. KENT (7210-26738, Ext. 508). AX 2-5989. 2-1

(Zone 5)
COMPTON & ACACIA, Compton. JODY CASSATT (9320-27689, Ext. 2151). NE 1-0531 2-5

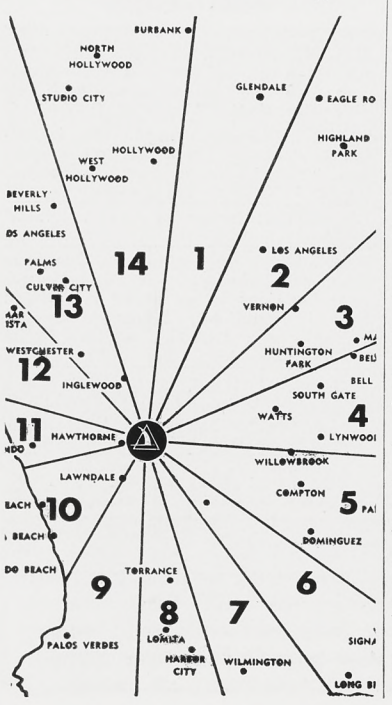
(Zone 7)
NORMANDIE & 186TH. PEGGY PERKINS (5352-16132, Ext. 1508), OS 5-5423. 2-7

VAN NESS BLVD. & 155TH, Gardena. (Ride needed immediately). MARY SMITH (5352-41445, Ext. 1453 or 1508). DA 9-3888. 2-7

CARSON & FIGUEROA, Torrance. GORDON C. WARD (4520-14033, Ext. 596). FA 8-1459. 2-7

(Zone 11)
INGLEWOOD AVE. AT 120TH, Hawthorne. JOHN R. FISHER (5583-42588, Ext. 1292). 2-11

Zone Map



RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 12)
INGLEWOOD & 111TH ST., Lennox. (One way—home—only). JUNE DOBKOSKI (5586-22692, Ext. 1973), OR 1-9898. 2-12

(Zone 13)
LA BREA & CENTURY BLVD., Inglewood. RICHARD LARSON (5584-40892, Ext. 1356) OR 2-9702. 2-13

7:30 a.m. — 4:15 p.m.

(Zone 1)
CRENSHAW AT MANCHESTER, Inglewood. (Mariposa). LOIS McGRAIL (5930-24952, Ext. 753). OR 1-4585. 3-1

WASHINGTON BLVD. & WESTERN AVE., Los Angeles. (Other convenient intersections: Santa Barbara Ave. & Western Ave., Pico Blvd. & Western Ave., 11th Street & Broadway, #5 bus route or W car route). LEONARD SCHOENFELD (5950-42997, Ext. 2498). 3-1

(Zone 2)
CRENSHAW & 104TH STREET, Inglewood. (Would like ride of anyone driving east on 104th to Crenshaw, or driving south on Crenshaw). DONNA POLLOCK (3272-42963, Ext. 1274), OR 1-1457. 3-2

(Zone 5)
COMPTON & ACACIA, Compton. JODY CASSATT (9320-27689, Ext. 2151). NE 1-0531. 3-5

(Zone 8)
CRENSHAW AND 101 (PAC. COAST HIWAY) (or Rolling Hills Road & 101 Highway). MARGARET WILSON (5339-16643, Ext. 2691), DA 6-0399. 3-8

SEPULVEDA & CABRILLO, Torrance. JEAN WIGG (9330-43018, Ext. 2228). DA 6-3330. 3-8

(Zone 10)
INGLEWOOD & EL SEGUNDO, Hawthorne. O. L. BENEZE (5262-24614, Ext. 2105). 3-10

EMERALD AND JUANITA AVE. Redondo Beach. JEAN ROBERTSON (4110-43259, Ext. 2331). FR 2-1235. 3-10

(Zone 12)
MONTANA AVE. & 11TH ST., Santa Monica. (Montana to Ocean Ave.; South to El Segundo Blvd.; East to Bldg. I, and return. Am interested in car pool). HAROLD L. FAIRCHILD (8620-12150, Ext. 1795). EX 5-0575. 3-12

MANCHESTER & COAST HIGHWAY, Playa Del Rey. (2 blocks south of Manchester, ¼ mile East of Coast Highway). JEAN FERRUCCI (8320-37306, Ext. 1605). CR 1-7310. 3-12

(Zone 13)
HAWTHORNE BLVD. & W. 105TH St., Inglewood (2). (Mariposa). RAY A. BERKLEY (5930-33759, Ext. 753), OR 4-3577. 3-13

8:00 a.m. — 4:45 p.m.

(Zone 1)
VERNON & 2ND AVE., Los Angeles (43). JANE NELSON (1422-42949, Ext. 688), AX 1-2762. 5-1

(Zone 7)
AVALON AND SEPULVEDA. Wilmington. (Car pool desired). F. GUTIERREZ (6457-41297, Ext. 478). TE 5-4874. 5-7

3:45 p.m. — 12:15 a.m.

(Zone 10)
RINDGE LANE & REDONDO BCH. BLVD., Redondo Beach. DONNA DONOVAN (1421-12230 Ext. 693), FR 4-5650. 6-10

(Zone 14)
FLORENCE AVE. & CRENSHAW, Los Angeles (43). Will take a ride to Plant 1 and take bus to Plant 3, but will have to be picked up at Plant 3 at night). EDNA S. CARMAN (5336-15879. Ext. 2768) PL 3-0633. 6-14

4:45 p.m. — 1:15 a.m.

(Zone 1)
GEORGIA OR FIGUEROA & 11TH ST., Los Angeles. (Needed at once). H. K. LITTY (5508-19781, Ext. 1333), RI 8-9069.

(Zone 2)
VERMONT AND 51ST ST., Los Angeles. GLORIANNE JONES (9330-41955, Ext. 2228) PL 9-7498. 8-2

(Zone 3)
FLORENCE AVE. & PACIFIC BLVD., Huntington Park). ESTHER COTTRELL (5352-41435). Ext. 1607). 8-3

Paint Shop Leader In Good House

Eight departments won sweepstakes honors during 1955 in the Factory Good Housekeeping competition, Factory Manager C. B. Spencer has announced.

Process Paint and Upholstery (Department 5508) led the way, winning the coveted title three times—first in July, then repeating in August and November.

Close runners-up in the good house honors, with two wins apiece, were Engine Door and Fairing Assembly (5544)—winner in April and May — and Production Mock-up and Quick Fix (5515), whose members kept the best house in September and October.

The Machine Shop, Sheet Metal, Flight Service, Rocket Pod Assembly, and Outer Wing Structure copped remaining sweepstakes honors during the year, Spencer said.

The competition is run in four sections, Spencer explained, with the winners of the sectional honors competing for sweepstakes commendation.

Runners-up in the monthly sweepstakes (section winners) were as follows:

January—Departments 5509, 5520, and 5534.

February — Departments 5501, 5585, and 5622.

March—Departments 5507, 5538, and 5588.

April—Departments 5501, 5502, and 5622.

May—Departments 5501, 5502, and 5588.

June—Departments 5501, 5502, and 5587.

July—Departments 5507, 5515, and 5583.

August—Departments 5502, 5507, and 5524.

September — Departments 5507, 5508, and 5517.

October—Departments 5507, 5508, and 5518.

November — Departments 5515, 5524, and 5585.

December — Departments 5508, 5516, and 5524.

RIDES WANTED

4:45 p.m. — 1:15 a.m.

(Zone 6)
ROSECRANS & GRAMERCY, Gardena. LOUELLA E. KIRBY (5340-43206, Ext. 1975), DA 9-2304. 8-6

(Zone 8)
WESTERN AVE. & 259TH ST., Harbor City. BERTHA L. CHURCH (5355-43222, Ext. 487, 1575), DA 6-5228. 8-8

(Zone 14)
LA BREA & MELROSE or Crenshaw-Vine, Hollywood (4). MRS. OLLIE W. SIEGEL (5251-15749, Ext. 2576). 8-14

Miscellaneous (Split Shifts)

(Zone 5)
SO. VERMONT AVENUE & 131ST STREET or So. Vermont Avenue & El Segundo Blvd., Gardena. (Ride needed from February 13, Mariposa. Hours: 7:15 a.m. to 4:00 p.m.). JOANNE L. IRWIN (6001-25186 Ext. 401 or 402). FA 1-3686. 10-5

(Zone 9)
ELENA & HIGHWAY 101, Hollywood Rivera, Redondo. (Hours: 4:15 p.m. to 12:45 a.m.). HELEN I. ARCHER (4240-42986 Ext. 777). FR 5-8806. 10-9

(Zone 10)
TULITA & AVE. C., Redondo Beach. (Mariposa: Hours 6:45 a.m. to 3:30 p.m.). LORI LYDON (6230-13839, Ext. 3201). FR 5-6693. 10-10

(Zone 12)
DENROCK & 80th (West of Sepulveda), Los Angeles. (Mariposa: Hours 7:15 a.m. to 4:00 p.m.) DORIS PERKINS (9320-41732, Ext. 487). OR 2-2060. 10-12

(Zone 13)
GLASGOW & HILLCREST, Inglewood. (Mariposa. Hours: 6:45 a.m. to 3:30 p.m.). L. E. DORSETT (6270-27551, Ext. 3-612), OR 1-8173. 10-13

BBSF CLASSIFIEDS

(Continued from Page 3)

FOR SALE OR TRADE

IMPACT WRENCH. Ingersoll Rand Electric, sockets and drill chuck, cost $161, $90. DON MUIR. Write to Northrop News. Box 1116. M

HOUSE, 3 yrs. old, 2 bedrooms, venetian blinds, attached garage, 50'x150' lot, completely fenced, near schools, shopping center N. Redondo. Full price $9250 payments $67.50. Trade equity for 1955 model auto or 18' to 20' boat or sell for $2600. FR 4-3654 after 5 p.m.

BOW, like new, 55 lb. Ben Pearson, $10 or trade for 35 lb. recurve type bow in good condition. R. H. PAYNE, GA 5-8154. M

FORD, 1942 Deluxe, good tires, body, $85. OR 8-7318. M

MOVIE CAMERA. Kodak, 8mm and carrying case, model 25, $25; and Westinghouse upright VACUUM CLEANER. $10, or will take good used typewriter of equal value in trade. K. R. HARMON, FR 5-4642. M

PIANO, large up-right, Underwood, $50. B. C. FINCH, WI 7-2387. D

AUTOMATIC WASHER, Bendix Economat, will trade for trailer with '56 license, $35, TE 3-3968. D

PLYMOUTH, 1953 4-door Cranbrook, trade for GMC or Chevy pickup of equal value. JEANE OSET, Write to Northrop News, Box 1126. M

WASHING MACHINE, wringer type, timer and pump. $49.00, or trade for console radio-record player, sewing machine or what have you? W. R. WATKINS. FR 5-2439. M

LINCOLN, 1947 club cp., near new '53 Ford engine, elect. windows, overdrive, $195, or trade for '39 or '40 Ford. E. W. BISHOP. OR 7-8519. M

FREE (To be given away)

TOM CAT, big, homeless, lovable, mistress died; also fluffy half-grown YELLOW KITTEN. FR 2-9051. D

RENTALS OFFERED

SHARE HOME. will share my 3-bedroom, furnished, Morningside Park home with two working people. Call after 2 P.M. M. M. GARD. PL 4-8289. E

SHARE HOME. Girl to share 2-bedroom and den, modern home with working girl. OS 5-3505 after 5:30 p.m. E

SLEEPING ROOM, outside entrance, man only, garage available, $10 week, $40 month. L. S. FOGLE, OS 6-4124. E

SHARE APARTMENT. Lady would like to share apt. with working girl. Lunches packed if desired. Dr. Letha Somers, HE 5-1942. E

APT. 2-bedroom unfurnished, walk to Northrop, garage. Available Feb. 5, 1956. $75 month. PAUL E. FLAMING, OSborne 6-1985. E

HOUSE. Two-bedroom, fenced yard, w/w carpeting, two car garage, partially furnished, Manhattan Beach. available immediately, $100 month. RAY HINKLEY, AX 3-3662. E

DUPLEX. One bedroom, unfurnished, baby OK, $50. G. H. ANDERSON. OS 5-2880. E

APARTMENTS, 2 bachelor size, $30; 1 apartment, $60. middle-aged couple preferred. near Northrop. JOHN A. PETRINA. Write to Northrop News Box 1131. E

RENTALS OFFERED

APARTMENT, One-bedroom, unfurnished, garage, $72.50. R. W. FEENY, EA 2-0646. E

APARTMENT, new 1 and 2 bedroom unfurnished, garage, near Century and Crenshaw, $77.50 & $95. Children OK. EXbrook 6-6823 or 9-5587. E

HOUSE, one-bedroom, furnished, fenced yard, $60, Lennox area. Call PL 6-8954. E

TRAILER. Modern, 3 rooms, 10 minutes from Northrop, late model, $46 per month. E. C VALIQUETTE. PL 4-2570. E

SMALL HOUSE, adults only, $40 per mo. E. C. PATTERSON. DA 9-1268. E

ROOM—3 blocks from Plant 1, close to transportation, day shift preferred, $7 per week. D. J. HADDAD, OS 6-9567. E

RENTALS WANTED

HOUSE OR DUPLEX. Couple, 1-bedrm, unfurnished garage, reas. rent, Hawthorne. MARGIE BUNKE. Write to Northrop News Box 1104. F

HOUSE. Two-bedroom with yard for children, Inglewood, Hawthorne, or Lawndale area, $60-$65 per mo. M. WALKER, FR 7-1732. F

HOUSE OR APARTMENT. Furnished, 2-bedroom, have child 3 years old, not over $70. AUDREY HARRIGER. Write to Northrop News, Box 1115. F

HOUSE. 1- bedroom, unfurnished, middle aged couple, up to $55, Northrop Hawthorne area. LESTER J. MORR. Write to Northrop News, Box 1132. F

CHILD CARE OFFERED

CHILD CARE. Will care for children 2½ years and up. Large fenced yard, near schools in Hawthorne. $2.50 day. HOWARD FALLEN. OS 5-9596. G

CHILD CARE in my home. Infant to 7 yrs., day or night shift. Fenced yard, hot lunches naps—five minutes from Plant One. Reasonable rates. C. W. SOUDER, OS 6-6074. E

CHILD CARE, ages 3 to 10 yrs. Lawn play yard, fenced, play equipment, birthday parties, hot lunches, naps, snacks. Near school, day or night shifts. Call OS 5-7993. G

CHILD CARE, days or evenings, parents must furnish transportation. Call FRontier 5-9885 evenings or weekends. G

FOUND

LADY'S WRIST WATCH, near plant #1, approx. Dec. 14, 1955. Owner may claim by proper description. H. E. ROSS OXford 7-3763. K

PERSONALS

THANKS. We wish to extend our thanks to fellow Norcrafters for all they have done and acknowledge the kind expressions of sympathy in the recent loss of our daughter. MR. AND MRS. DONALD SNODGRASS. L

CATERER for women's club, 12 to 20 dinners, 1st & 3rd Thursday of each month. PL 4-6518 after 5:00 p.m. L

SEWING and ALTERATIONS, ladies' and children's. Call FRontier 5-9885 evenings or weekends. L

Radioplane Perfects . . .

(Continued from page 1)

a target for ground-to-air and air-to-air gunnery, rocketry and missile training.

It is easily converted with "bolt-on" equipment for use as a camera plane for battlefield or over-water surveillance, airborne nuclear detection, weather reconnaissance or as a flying test bed for missile sub-systems.

The plastic construction of the RP-77 consists of new methods of applying glass fiber cloth in layers. This is bonded and reinforced by polyester resins.

The inherent smoothness of the material enhances the aerodynamic qualities of the drone, and the plastic possesses a high impact resistance. This is a strong factor in choosing the plastics used as the drones are recovered by parachute and used again and again. Unless destroyed by gunfire the airplanes usually may be easily repaired in the field.

Radioplane officials point out that the RP-77 has been designed on proved drone principles, using reliable equipment selected and developed during the company's long history of drone development.

Radioplane presently manufactures the OQ-19, the standard operational drone in the military services, and has delivered more than 40,000 pilotless aircraft to the armed forces. Radioplane also is engaged in development and production of guided missiles, complete weapons systems, electronic equipment and parachute recovery systems.

Buy U.S. Savings Bonds

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
League play now in progress Mondays, 6:30, Fremont High School; Thursdays, 6:30, John Muir Jr. High School.

BIBLE STUDY, Roy Stahl
Meet daily, Plant 1, east mezzanine conference room, 11:15 a.m.; Plant II, M.W.F. 12:00 conference room M1-B1; T.Th. 12:30 conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting.

BOWLING (days), Wayne Chamberlin

BOWLING (nights), Garland Steiner
Winter leagues now in progress.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m. Next—February 14.

CAMERA CLUB (days), Howard Linnenkohl
Meet 1st & 3rd Friday evening, 7:30 p.m. Next—February 4.

CAMERA CLUB (nights), Gene Beck
Meet 1st & 3rd Saturday, 7:30 p.m. Next—February 5.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next—February 22.

GOLF, Andy Titus

GOLF (nights), Leo Baker
Three-Club Tournament February 26, Fox Hills. Applications available in Personnel Activities.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

GUN CLUB (nights), C. B. Hays
Meet every other Monday, 12:00 noon. Next—February 13.

MIXED CHORUS, Florence Graveline
Meet every Tuesday evening, 7:30 p.m.

MODEL AIRPLANE, R. T. Hood
Meet 1st and 3rd Monday, 7:30 p.m. Next—February 6.

MODEL RAILROAD CLUB, John Felder
Meet every Sunday morning, 9:00 a.m., and every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays. Next—February 13.

RADIO CLUB
Meet 3rd Tuesday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—February 4.

SKI CLUB, Howard Fletcher
Meet every Thursday evening, 7:30 p.m.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Next—February 28.

EXCLUSIVELY FOR THE LADIES

BASKETBALL, Pam Thompson
League play Alondra Park Gym, Tuesday evenings.

BOWLING (days), Lee Hopkins
Winter leagues now in progress.

INTERIOR DECORATION
Weekly meetings in lampshade making every Thursday evening, 7:30 p.m.

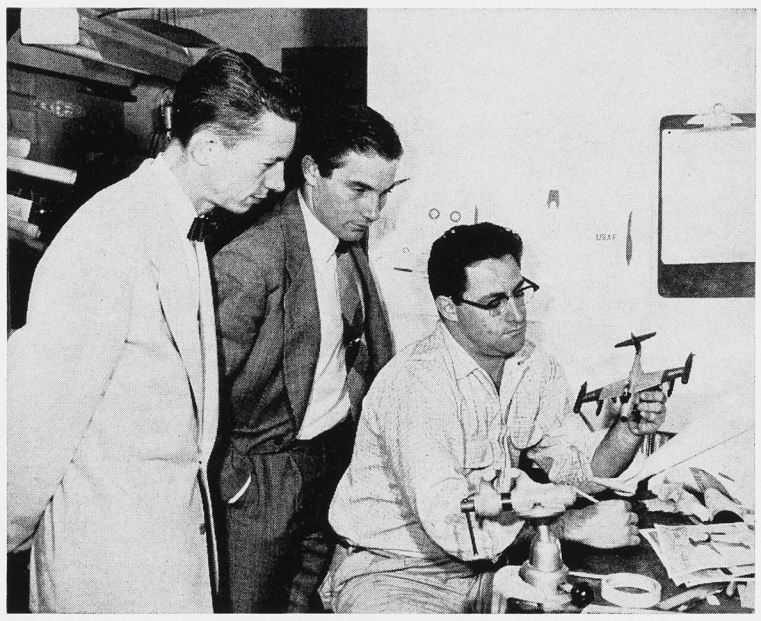
SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet Tuesdays, 7:00 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Hetty Horner
Meet first and third Thursdays, 7:30 p.m.

SPORTS

The Northrop News

SCORPION MODELS ON SALE



INFINITE DETAIL characterizes Scorpion model made by Revell Industries, Venice. Model kit goes on sale Thursday, February 2, at 3:45 p.m. at Personnel Services tool store. Johnny Johnson, Northrop engineer (at left in this picture), was technical advisor to Revell on project. Center is Charles Gretz, Revell engineer, and third man is Al Bennett, of Revell, who made the first hand-made prototype. See story at right.

F-89 KITS EARN WIDE ACCLAIM

The amazingly detailed and well-executed Revell Industries F-89 Scorpion models, eagerly awaited by Norcrafters, officially go on sale tomorrow—February 2—at 3:45 p.m. Location—the Personnel Services tool store, Plant One .

The kit, which sells for 89 cents (plus 15 cents for plastic cement), has already gained nationwide recognition for its faithful detail. Sale of the model culminates many months of preparation by the Revell personnel and by Norcrafters who cooperated with them.

Arrangements for the manufacture of the model were originally made by William Cox, of the Public Relations Motion Picture department, with assists along the line from several Norcrafters.

After Revell had agreed to undertake the job of making the model, Henry A. "Johnny" Johnson, presently in charge of Service Engineering group out of the F-89 Weapon System Project Office, acted as technical advisor for Northrop on the project.

Sideline comments indicate that the perfection, accuracy, and detail of the little model were due to a happy combination of Johnny's supervision and Revell craftsmanship.

The model caught on almost immediately, when a Revell representative took the company's first "prototype" model back East. The model captured the fancy of Air Force representatives there.

Now the model has prospects far beyond original expectations. It is scheduled for use in Air Force recruiting efforts, according to reports from the East, and has already been utilized as the subject of paintings which adorn Northrop national advertising.

The high-scale use to which the model is being put does not, however, lessen the enjoyment which many Norcrafter fathers and mothers will experience as they assist their offspring in putting together the models of the mighty weapons they build . . .

NRC Activities Increase; Camera, Skating in Class

The first weeks of the new year have seen a steady activity upswing in almost all NRC clubs.

Many of the clubs are starting instruction courses for beginning members. The newly-announced safety training program for all clubs should prove to be both interesting and informative and, as usual, the red carpet is out for all prospective members in all NRC activities.

Among the announcements of training classes being held for beginners is a bulletin from the NRC Camera Club informing novice photographers of a series of darkroom classes starting on February 7. The classes are scheduled to start at 7:30 p.m. in the NRC Clubhouse annex.

The darkroom facilities are available to club members on each night of the week. Regular Camera Club meetings are held on the first and third Friday of each month at 7:30 p.m. in the Clubhouse annex. All Norcrafters are invited to participate.

The NRC Roller Skating club has made arrangements for skating lessons for beginners and brush-up lessons for dance skaters to be given at Redondo Skateland. The instruction will be under the direction of professional instructors for a fee of 50¢ per lesson.

The club skates at Redondo Skateland each Wednesday from 7:30 to 10:30 p.m. Door prizes are awarded twice a month and pot luck suppers are held the second Wednesday of each month.

Special admission rates are allowed Norcrafters who present their I.D. cards at the box office (adults, 50¢; children under 12, 30¢; skate rental, 25¢).

The next pot luck supper will be held on February 8 in the NRC Clubhouse starting at 6:00 p.m. Club Comish Evelyn Lester invites all Norcrafters to bring something to eat — casserole, salad or dessert—and join in the fun. Family and friends also invited.

INGLEWOOD HIGH CLASS OF 1946 TO HOLD REUNION

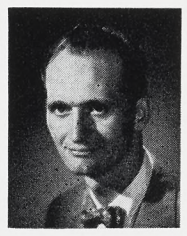
The Inglewood High School Class of 1946 will have its ten-year reunion Saturday, February 26, 1956, at a buffet-dance at the Mayflower Ballroom, 234 Hindry Street, just west of Manchester and Freeman, in Inglewood. Many Norcrafters are expected to attend. Cocktails will be served from 7 p.m., the buffet from 8 p.m., and dancing will be from 10 p.m. until 2 a.m.

The cost is $3.25 per person. Reservations may be secured by check made payable to "Inglewood High Class of 1946", mailed immediately to John Brown, 11000 Acacia Ave., Inglewood 2, California. Special entertainment will be provided by talent from the class of 1946.

Membership Lines Cast --Surf Club

By HAL HUNSBERGER
President
Northrop Recreation Club

All Norcrafters and families are invited to attend the monthly field and business meetings of the Surf Fishing Club. If you have not tried this year 'round inexpensive form of fishing, you have missed one of the finer things in life. Monthly cash prizes are given for the largest catches of surf fish. Monthly trophy given for largest fish caught at field meets and a yearly trophy for the largest registered fish of the year. Instructions are given to newcomers to this sport plus advice in the selection of suitable outfits.



★ ★ ★

The Club has made arrangements with the United States Coast Guard Auxiliary for a free course of instruction in "Small Boat Handling" and "Safety at Sea". Course will be sponsored by the NRC Boat Club and will run for a period of ten weeks starting Thursday, February 2, 1956, at 7:30 p.m., in the Clubhouse. Movies, diagrams, charts and other mediums of instructing the course will be furnished by the U.S.C.G. Auxiliary

★ ★ ★

Every Tuesday eve at 7:30 p.m. the Mixed Chorus meets at the NRC Clubhouse. We are starting the new year with several goals to attain, one of which is more voices! Those of you who were unable to join us on Wednesdays may find it possible now that we are meeting on Tuesday evening. Next engagement is Saturday, February 25, 1956, for the Los Angeles Bureau of Music Industrial Choral Festival, East Los Angeles Jr. College Auditorium, 8:00 p.m.

★ ★ ★

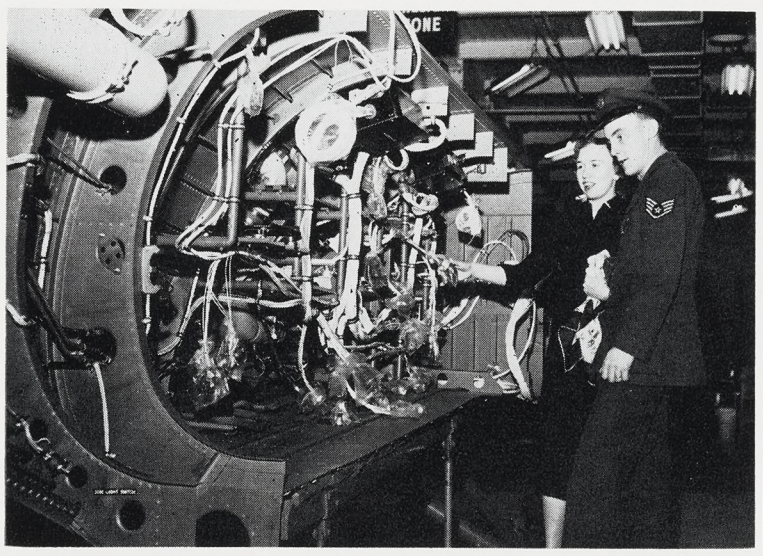
NRC's Chapter of Toastmasters International, "Northrop 212", is celebrating the anniversary of its charter acceptance this month. In keeping with the occasion, a membership drive is being launched.

TM Installation

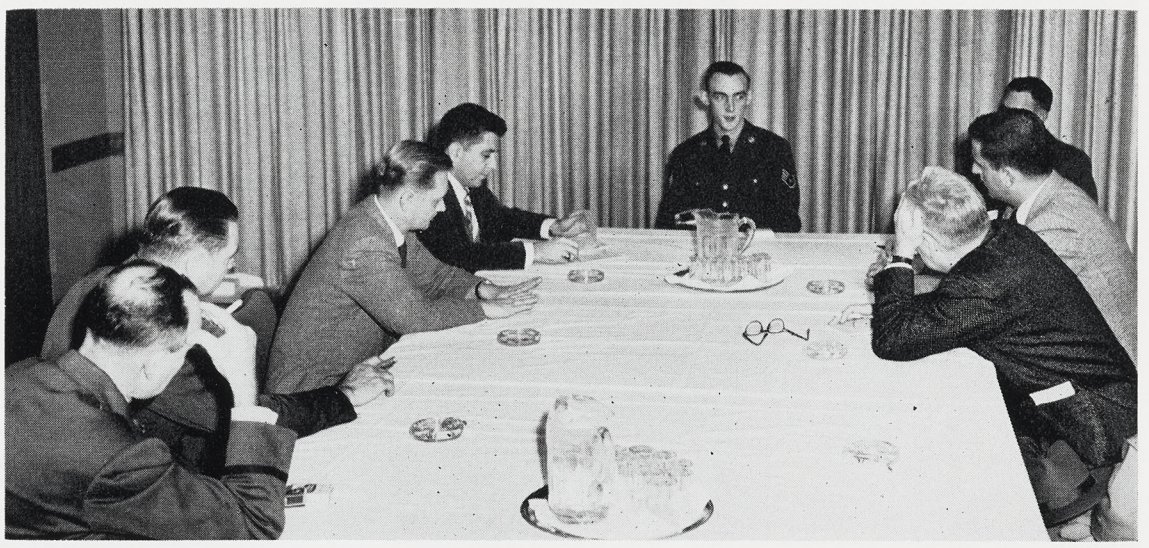
NEWLY ELECTED—. Newest officers of the NRC Toastmistress Club are pictured, from left: Dorothy Lewis, secretary; Hetty Horner, president; Viva Murphy, junior past president; Monica Richardson, installing officer and vice chairman of the Founder's Council; Beatrice White, vice president; Peggy Barber, treasurer; Rona Jefferson, club representative. Installation was last month.

THE Northrop Scene BY DAY AND NIGHT

GREET THE SUNNY CLIMES—. Staff Sergeant Richard H. and Mrs. (Roberta) Holden, as honor for being selected Airman of the Year, Alaskan Air Command, arrive via Western Air Lines at LAX ready for Southland tour as Northrop guests. Sergeant Holden's record of keeping his "D" Scorpion combat-ready at the 18th Fighter-Interceptor squadron won for him the March '55 Airman of the Month, led eventually to year award. (See Northrop News—May 25, 1955.) Airman of the Month and Airman of the Year is program of military achievement award co-sponsored by Northrop Aircraft and the Alaskan Air Command.

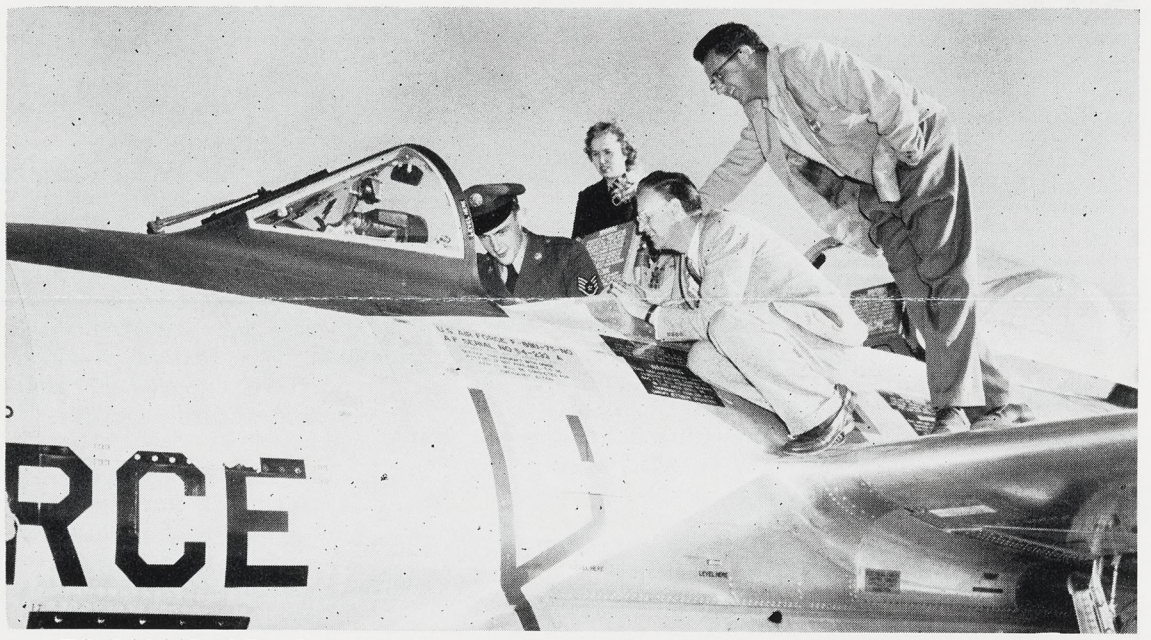


HERE IS WHERE they are built—. The sergeant and his pretty wife visit Scorpion factory areas as one of first events of all-expense-paid holiday. Sergeant knows his Scorpions as well as any man, but was amazed at magnitude of assembly lines. Norcrafters and Air Force personnel jointly took Holdens in tow, were from USAF Office of Public Information, Los Angeles; from Northrop Customer Relations, Public Relations, and Photo Lab. Whirl of good times continues.



FULL-FLEDGED PRESS conference—. Sergeant Holden met the press, did not quail before barrage of questions (as many men have done before him). He proudly extolled virtues of the Northrop Scorpion, his Command, his country, and the Air Force, and Alaska. During press meet—at Statler—the Mrs. was at Queen for a Day. Holdens really saw sunny Southern California—20th Century-Fox Studios, Cocoanut Grove, Rose Parade, Michigan State vs. UCLA in Rose Bowl, Marineland, Anaheim plant, plus many more interesting sights.

AIRMAN OF THE YEAR



TO PALMDALE, where Scorpions take off for Alaska—. Sergeant and Mrs. Holden take keen interest in bran' new F-89s ready on flight line for Air Force delivery. Cockpit photo shows the sergeant in pilot's seat; Mrs. Holden; Frank Mathes, Customer Field Service; and Frank Schroeder, Palmdale Flight Service.

A DAY AT the races—. Off to Santa Anita went the Holdens. "Airman of the Year" handicap was feature of the day, and Mrs. Holden is on hand with honored hubby to present laurels to winning horse, owner, trainer and jockey. While in Los Angeles, Holdens stayed at suite in Hotel Statler. Nice work if you can get it . . . and Sergeant Holden worked for it—long hours in rigorous weather. The reward was grand.

AT DISNEYLAND—.The sergeant and his wife went to Disneyland—a highlight - headline of Southland holiday. Camera was part of their equipment. They are shown leaving Fantasyland, brimming with vigor and ready to see more. Who will be the Alaska Airman of Year in '57?

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, February 15, 1956

Early Plans for Optical Tooling Showing Results

OPTICAL TOOLING, as used on Boeing sub-contract, can be likened to aiming rifle through telescopic sight. Russ James, Quality Control, sights through telescope at left at fixed target, right, to check alignment. Don Rhea, Manufacturing Research and Development tool engineer on the jig project, is other Norcrafter shown.

Forward-looking studies instituted three years before began to pay off toward the end of 1955 in tooling, when jigs incorporating the precision principles of optical tooling were completed for use on the Boeing KC-135 wing sub-contract.

Investigation of the system was assigned to the Manufacturing Research and Development group under Doug Hugill. The studies culminated in the purchase of specialized equipment; the development of an individual method of use adapted to Northrop's own particular requirements; a training program to familiarize Tool Design and Jig Construction Norcrafters with the equipment; and, finally, the building and presently successful use of the jigs.

Used for the accurate establishment of jig alignment, optical tooling principles may be likened to the aiming of a rifle equipped with telescopic sight.

In optical tooling a telescope with 40- to 60-power magnification is placed in a permanently mounted fixture on one end of the jig and "zeroed" to a target similarly located at the far end of the jig.

The optical sight line which is thus established becomes the datum line, or fixed reference. From it displacement of intermediate jig details can be accurately detected by sighting to targets on the details. An optical micrometer incorporated in the telescope gives direct reading to one-thousandths of an inch in horizontal and vertical displacement.

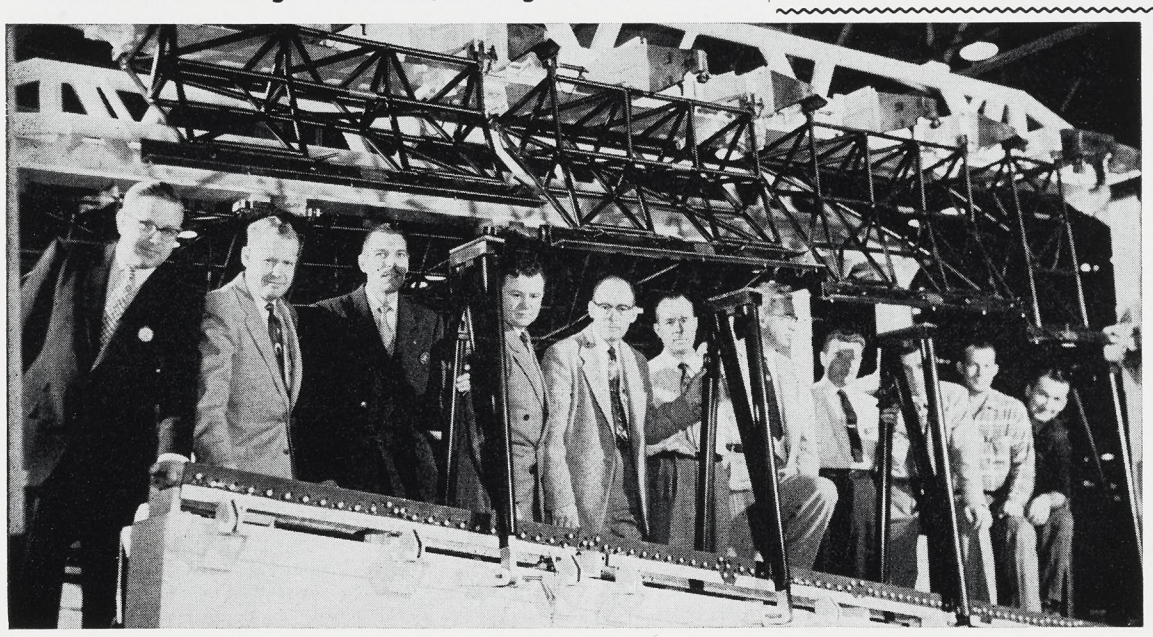
In addition to provision of more accurate control of the jig structures in initial stages, the system provides for exact re-establishment of the original optical sight line whenever necessary. The feature greatly reduces time required to perform periodic Quality Control checks on a jig, as well as time necessary to alter a jig in compliance with any engineering changes.

In training phases, Tool Design came up with a training jig, built by Department 5411 (Jig Construction). An optical tooling manual prepared by Manufacturing Research and Development was released, and Industrial Training Administration personnel conducted classes that followed in the theory of design and jig construction.

Additional classes were then held at the training jig for Jig

(See Early Plans, Page 2)

LINED UP along KC-135 outer wing jig are Boeing reps and Norcrafters instrumental in developing this tooling. From left: Don Allen and Bob Harbord, Boeing; Don Rhea, Northrop Manufacturing Research and Development; Dwight Hansen and Herb Peterson, Boeing; and Norcrafters Jim Alger, Boeing project Tool Fabrication; Gordon Grimm, assistant superintendent, Tool Fab; R. L. Smith, Jig Construction; Bob Lieber, section superintendent, Tool Fab; N. C. Nelson and George Siroshton, of Jig Construction.



NEW STAFF AIDES NAMED BY COLLINS

NETTLETON TO RADIOPLANE AS VICE-PRESIDENT; MACDONNELL AND ROTH NEW ASSISTANTS

The election of J. G. "Gil" Nettleton to a vice-presidency in Radioplane Company, announced by President Whitley C. Collins on January 30, has been followed by the appointment of two new members to the President's executive staff.

J. Grant Macdonnell has been named by Collins to Nettleton's former post of assistant to the president at Northrop; and Irving Roth was appointed staff assistant to the president. Both appointments were made effective on February 1.

Nettleton's election as vice-president of Customer Relations and assistant to the president at Radioplane filled a vacancy created by the resignation of Ferris Smith. Smith continues as a member of the Radioplane Board of Directors, Collins' announcement said.

Nettleton joined Northrop in 1946 as a production test pilot and customer relations representative.

In December, 1949, he was named director of Military Relations. In these duties he was active in the development of the unique Operational Indoctrination ("Opindoc") teams sent by Northrop to Air Force units using F-89 Scorpions.

Gil was promoted to assistant to the president in May of last year.

One of the founders of the national Night Fighter Association, he was elected to that organization's presidency in 1954. He had served for four years in the Air Force, principally as an instructor.

Grant Macdonnell, the new assistant to the president at Northrop, has been with the company for over 13 years, and has most recently been serving as budget administrator.

A native Pasadenan, Macdonnell attended famed McGill University, Montreal, Canada. He held positions with the National Trust Company, Ltd., in Canada, and with the First Trust and Savings Bank, Pasadena, before coming to Northrop as a supervisor in Accounting.

J. G. "GIL" NETTLETON

During his Northrop career he has been director of Special Weapons Administration and, as noted above, budget administrator.

Irving Roth was, until his appointment as staff assistant in the president and chief executive's office, assistant director of budget for aviation and guided missiles in the office of the Secretary of Defense.

During his seven years in that office, Roth represented the department in reconstituting the Japanese aircraft industry. He assisted in negotiating a bi-lateral government agreement to build jet aircraft in Japan.

Roth attended Southeastern University, in Washington, D.C., graduating with a BCS degree in 1941. He is married and has two children.

Roth's home, until moving to Southern California, was in Fairfax, Virginia.

GRANT MACDONNELL

IRVING ROTH

Last Chance to Qualify For No-Exam Major Med

Last call for dependent major medical group insurance coverage without physical exams!

Bill Waldon, Group Insurance supervisor, reminded Norcrafters this week that enrollment in dependent major med can be accomplished until Friday of this week — February 17 — without the necessity of examination. The coverage is effective Monday, February 20, provided a sufficient number is enrolled before that date.

Cost of the plan is only 51 cents weekly. This sum pays for coverage of all the Norcrafter's dependents, no matter how many. (Norcrafters themselves are covered at no cost, the company paying the premiums).

Application forms for the no-physical dependent sign-up are available today, tomorrow, and Friday in the Group Insurance section, Plant One — extension 2586 — and from department clerks.

There are only two limiting factors:

The first: — dependents who have been previously examined

(See Last Chance, Page 3)

MC Makes Nominations - It's Massey vs. Hampton

Following a "company state of affairs" talk by Vice-president Roland J. Pagen, Finance, the Northrop Management Club held nominations for 1956 offices at the Rodger Young Auditorium Saturday, February 4.

Nomination sessions, conducted by Prexy "Scotty" Smith, advanced the following Norcrafters:

For president — Loyal Massey, Plastic Shop, Manufacturing; and Ralph Hampton, Engineering Administration, Engineering.

For vice-president — J. P. Collier, Accounts Payable, Finance; John Dew, Outer Wing Installation, Manufacturing; Al Rathbun, Engineering Planning, Engineering; and Jack Lind, Manufacturing Control, Manufacturing.

For secretary—Elise Williams, Northrop Hospital, Industrial Relations; Bill Fox, F-89 Fuselage Assembly and Installation, Manufacturing.

For treasurer — Jim Dickey, Sub-contracts Planning, Manufacturing.

For sergeant at arms — Les Phipps, Plant Security and Protection, Industrial Relations.

For night shift vice-president — Carl Liedtke, Machine Shop, Manufacturing; Tony Gayou, Advanced Production Inspection, Quality Control; Jack Weidner, Tool Liaison, Manufacturing; Ted Holloway, Photo Lab, Engineering; George Babajian, Plastic Shop, Manufacturing.

Write-in provisions are being made a part of the ballot in case M-C members wish to cast votes for someone not formally nominated.

New Duties

For **George Buchner,** director of Contracts and Spare Parts, who has been appointed the Customer Relations division director for the missile program.

For **Gerard R. DuKet,** who has been named assistant manager of Contract Administration, succeeding **Frank Jenning** . . . Latter recently terminated.

For **B. R. Bonnett,** advisor to Vice-president, Manufacturing, who has been assigned special duties and investigations for the Vice-president's office on missile program.

Down - - - - - Range

Robert "Bob" Luxton, Plant Maintenance Norcrafter, recently earned a certificate of completion in the Civil Defense course in Light Rescue Training . . . Conducted by Civil Defense and Disaster Corps of the City of Los Angeles, course graduated Class No. 75, of which Bob was member, on February 2.

Art Pearson, Materiel, last month participated on panel at USC discussing tools for measuring and improving purchasing performance . . . Occasion was educational seminar of Purchasing Agents' Association of Los Angeels . . . On panel with Pearson were reps from Erhardt and Arthur, Inc., UCLA, and Union Oil Company.

Production Engineering Norcrafter T. C. Whitmore was acclaimed by metro press as hero late last year when he helped pull driver of burning truck from cab . . . Truck, equipped with portable X-ray equipment, overturned in traffic accident. . . .

NEW QUARTERS FOR OLIVER, COL. METCALF

Norcrafters who may have occasion to consult the patent counsel or the Associated Products offices will find that both have recently moved to quarters in Plant One.

Colonel H. E. Metcalf and his Patent Office staff are in rooms 25-26. Extensions are 487, 598 and 447.

John Oliver and the Associated Products group are in room 16, with telephone extensions remaining 1735 and 1736 . . .

Early Plans for Optical

(Continued from page 1)

Shop personnel, with previously trained members of the department passing on the knowledge they had acquired. By early '55 the affected departments had built a large reservoir of talent toward the day of use.

Thus Northrop was able to assure Boeing that design and fabrication personnel were indoctrinated in the optical tooling system required in the work on the KC-135.

The assurance has been justified by performance. The Boeing system, although differing in some respects from Northrop optical tooling methods, is now successfully applied, and the optical tooling phase of the contract was either right on or slightly ahead of the schedule mapped out for it.

Two Hawthorne Junior Achievement Firms Being Sponsored by Northrop

Last year's successful showing of a Northrop-sponsored Junior Achievement company has resulted in increased sponsorship and participation.

This year there are two local JA firms being coached by Northrop personnel in their "learn-by-experience" courses in business.

One, the Nor-Tray Company, manufactures and sells ashtrays; the other, B-Board Company, produces bulletin boards for use in the home. Both are composed of teen-age students from Hawthorne and Leuzinger High Schools.

Formed along standard Junior Achievement principles, the companies are organized like any company, with a full slate of officers. The two firms use a common production location at 831 North Prairie Avenue.

Northrop personnel act in a purely advisory capacity to the teen-agers, who design, fabricate, and market their own products.

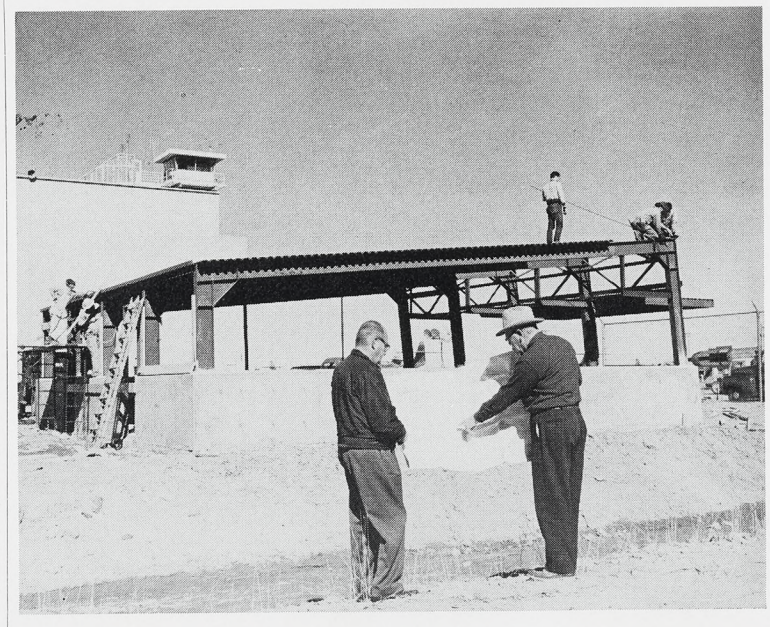
Harry Wildberger, Administrative Services, is business advisor; Rex Thornhill, Advanced Production, the production advisor; and Ross Rogers, LRI, the sales advisor for the Nor-Tray Company.

Advising the B-Board Company are Willard Lindstrand, Manufacturing Facilities and Budget Control, business; Lynn Covington, McDonnell project, production; and Jack Akin, Manufacturing Engineering Methods, sales.

Last year's Northrop-sponsored "Q-Board Company" won recognition in JA circles for its showing. To cap the year it took a first prize for year-end financial report, according to Charles Boyle, manager, PA&S, who was an advisor to that group and is coordinating this year's activities.

JUNIOR ACHIEVERS whose activities are sponsored by Northrop visited plant recently, were welcomed by Robert R. Miller, vice-president of Administration, who is management representative to JA groups. Bill Simpson, right, is president of Nor-Tray Company; at left is Ronnie Moore, prexy of B-Board Company.

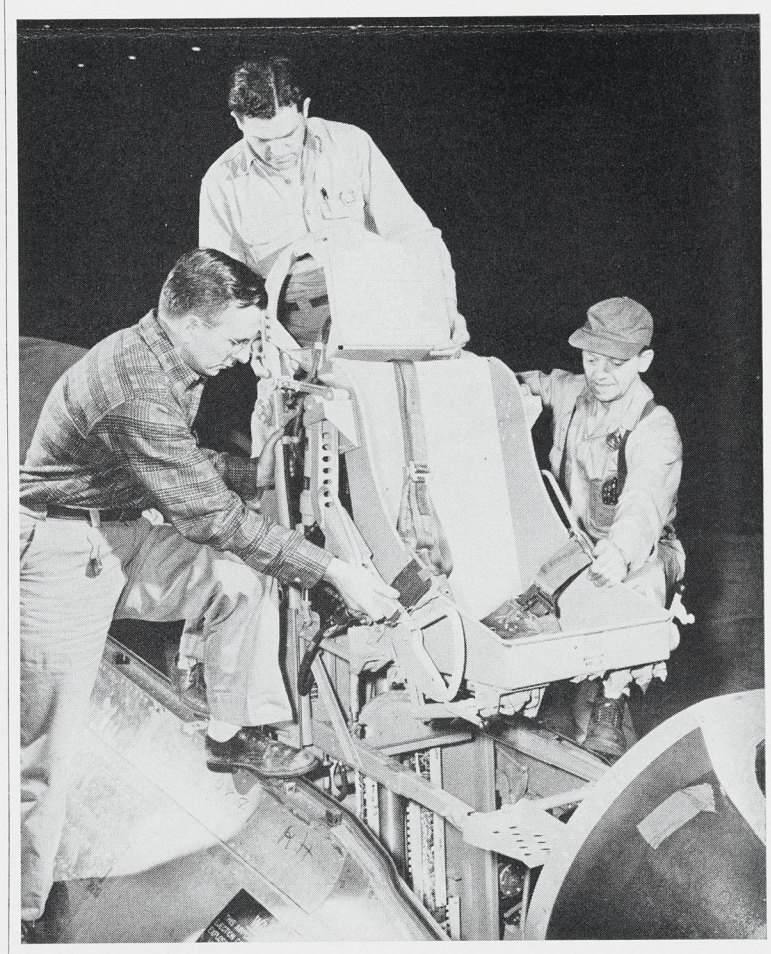
Palmdale Section



New Structure Rises

NEW PERSONNEL BUILDING at Palmdale, currently under construction, will house, in addition to employment staff, Plant Security and Protection, Wage and Salary, Group Insurance and Credit Union. Industrial Relations division functions to remain in offices on second floor inside main plant area—Dick Carroll, manager; plus Safety, Industrial Training, Personnel Activities and Services. Ed Walsh, right, chief field inspector for Holmes and Narver, architect and engineering firm, discusses print with Chief Bill Parker of Northrop Plant Security and Protection. Manderbach construction company men in background, working against backdrop of flight tower.

On The Line



WITH RO SEAT already installed, these three Norcrafters along the final line are carefully lowering the pilot's seat into the cockpit of F-89 Scorpion. From left: L. L. Jayme, E. C. Starks, and E. G. Modell.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 12

Published every other Wednesday by
INDUSTRIAL RELATIONS DIVISION, NORTHROP AIRCRAFT, INC.
JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

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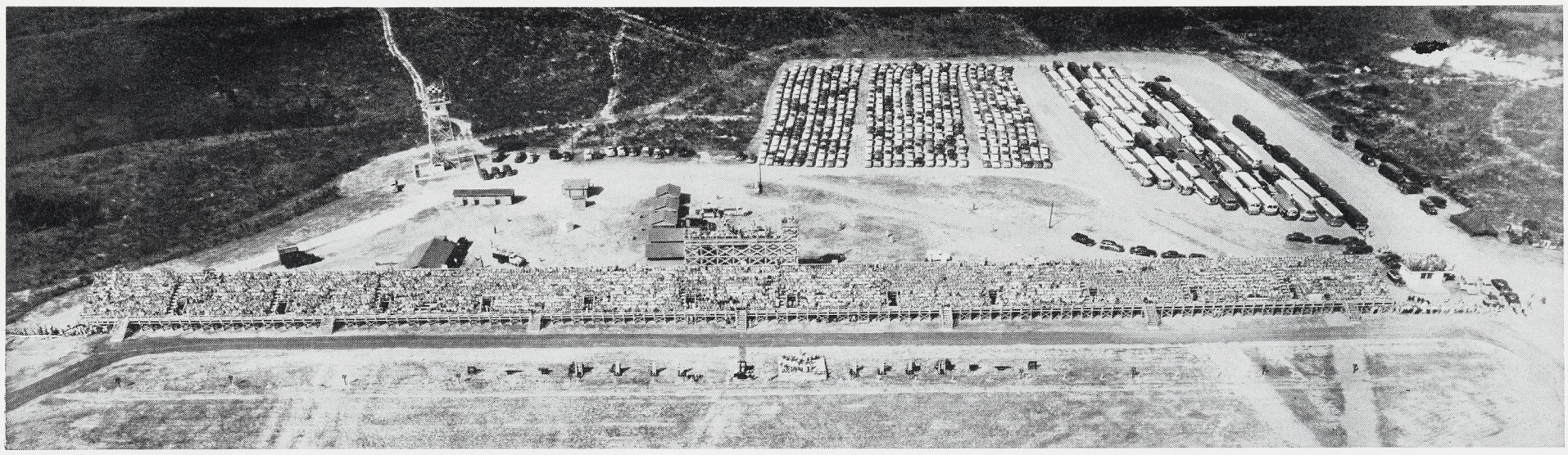


PHOTO COURTESY OF USAF AND AIA

Air Force Firepower, Precision

PRECISION marks Air Force handling of fire power demonstrations at Eglin Field, Florida. Photo shows grandstand capacity-full as civic dignitaries, foreign delegations, the press, and the military watch the October show. Note buses and cars in background parked so that departure may be made without customary traffic jam. High-speed Air Force aircraft assemble and perform at "deck" level over this stand from all compass points on split-second intervals. Northrop Scorpion fires 104 rockets simultaneously at target as part of show.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

"GMW" ads are run for one time only. If you wish the ad repeated, please fill out another form and forward to the News Office.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 5)
LAKEWOOD BLVD. & CENTER ST., Bellflower. ALLEN BISE (5238-15517, Ext. 2181). TO 6-3427. 12-5

7:30 a.m. — 4:15 p.m.

(Zone 4)
LAKEWOOD BLVD. & FIRESTONE, Downey. (Car pool desired). RICHARD J. HUBER (4210-43268, Ext. 1893), TOpaz 9-3031. 13-4

FIRESTONE & OTIS, South Gate. (Century or Manchester & Prairie to plant.) MORRIS BROWN (9350-27999, Ext. 474 or 1810). LU 5-3067. 13-4

(Zone 5)
MILLER AND LA PALMA or Miller and Orangethorpe, Buena Park. (Down Orangethorpe to Atlantic to Artesia to Plant Three to Plant One). BEN LOVERIN (8100-32252, Ext. 1518 or 1519), JA 7-4378. 13-5

LA PALMA AND FIRESTONE, Anaheim. (Car pool considered.) KENNETH E. FOSTER (4210-43334, Ext. 1893). 13-5

(Zone 9)
HOLLYWOOD RIVIERA, Redondo Beach. (Desire two additional members in existing 2-man car pool. Prefer Plant 1 or 2 employees.) JUD WELLER (3852-30105, Ext. 2158). FR 5-1077. 13-9

(Zone 12)
LOYOLA DR. & 93rd PLACE, L. A. 45. (Am interested in forming ride pool from West Westchester.) MIKE LEPPANEN (3870-33838, Ext. 2168, 2385). OR 4-1071. 13-12

(Zone 13)
VENICE BLVD. & SEPULVEDA, L. A. (Car pool desired). LESTER LEFF (5940-42795, Ext. 2661). EX 1-3843. 13-13

(Zone 14)
CRENSHAW & VERNON, SLAUSON OR 45th ST., L. A. 43 (Windsor Hills). S. R. OLDIS (5128-14408, Ext. 1929). AX 3-4449. 13-14

4:45 p.m. — 1:15 a.m.

(Zone 6)
HUNTINGTON BEACH (101 Hiway via Figueroa, El Segundo & Crenshaw.) B. L. JACOBS (5507-19347, Ext. 526). LE 6-2311. 18-6

(Zone 13)
PACOIMA, VAN NUYS, RESEDA AREA. (Car pool desired). B. M. WATERS (7320-26915, Ext. 2362), ST 5-5192. 18-13

Miscellaneous—Split Shift

(Zone 7)
WESTERN & 166th, Gardena. (Room for 3 or 4. Mariposa: Hours 6:45 A.M. to 3:30 P.M.) MARY JO SMITH (6378-43285, Ext. 3-375), DA 4-3589. 20-7

Bonds • Best Bet

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 2)
CRENSHAW & 111TH PLACE, Inglewood. JANICE SHANKS (5353-38, Ext. 1686), OR 7-0372. 2-2

VERMONT AND GAGE AVE., Los Angeles. JEAN BALL (5507-37965, Ext. 725), PL 2-3358. 2-2

(Zone 3)
VERMONT AVE. & 103rd, Los Angeles. BOB MOORE (5374-37516, Ext. 1576). PL 5-0365. 2-3

(Zone 4)
FIRESTONE & LONG BEACH BLVD., South Gate (near Atlantic and Tweedy). FRANCES ORR (5621-24026, Ext. 2649). LO 9-5429. 2-4

VALLEY BLVD AND PUENTE AVENUE, Puente. JO SILVA (5354-35977, Ext. 467, 468 or 2207). 2-4

(Zone 5)
BUENA PARK. (Moving to Buena Park March 1-15; will accept any ride in that area; can work any day shift hours). NANCY T. JENNO (1422-37294, Ext. 696). OR 4-3064. 2-5

WESTERN AND EL SEGUNDO BLVD., Gardena. D. E. LAWRAY (5501-17385, Ext. 2200). DA 3-3435. 2-5

CARSON AND ORANGE, Long Beach 7. G. J. GRUMMER (5161-14909, Ext. 2071). GA 7-4370. 2-5

ORANGETHORPE & NICHOLAS, Fullerton. JOHN J. MATYAS (5501-17476, Ext. 2200). LA 5-9351. 2-5

(Zone 9)
WINLOCK ROAD & 101 HWY, Walteria. JOHN DE CESARE (5223-43582, Ext. 1486). 2-9

(Zone 10)
PACIFIC COAST HIWAY & 3RD STREET, Hermosa Beach. (Needed immediately). FRANK HILL (5583-42602, Ext. 2097). 2-10

INGLEWOOD AVE. & 130th ST., Hawthorne. FANNIE B. LICHTY (5503-18299, Ext. 2431). OS 5-5571. 2-10

PIER AVENUE & REDONDO BEACH, Redondo Beach. MARY HELEN OCHOA (5355-43281, Ext. 2083). FR 9-3404. 2-10

(Zone 12)
MONTANA AND 17th, Santa Monica. VINCE DIXON (5355-43567, Ext. 1575). EX 5-3662. 2-12

(Zone 13)
SEPULVEDA & WASHINGTON, Culver City. HAROLD L. BENNETT (5340-16561, Ext. 1514-1641-2710). 2-13

BURBANK AND HAZELTINE, Van Nuys. GUY FLECK (5501-40590, Ext. 2200). 2-13

PRAIRIE AND 106th ST., Inglewood. MARILYN FAIRBANKS (5000-26434, Ext. 1217). 2-13

WASHINGTON BLVD. & HIGUERA, Culver City. (Ride needed for two.) M. S. McKELLAR (5223-15340, Ext. 1485). VE 8-6289. 2-13

(Zone 14)
PRAIRIE AVE. & 104TH, Inglewood. H. E. SKOGSBERG (5508-84, Ext. 2756). 2-14

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 2)
VERMONT AND W. 80TH, Los Angeles (44). VIOLET GALIOTO (5240-36585, Ext. 2667-2668-2669). PL 2-5732. 3-2

CRENSHAW BLVD. & 104TH or CRENSHAW & CENTURY, Inglewood. DONNA POLLOCK (3272-42963, Ext. 1274 or 2462) OR 1-1457. 3-2

(Zone 4)
LAKEWOOD BLVD. & FIRESTONE, Downey. (Car pool desired). RICHARD J. HUBER (4210-43268, Ext. 1893), TOpaz 9-3031. 3-4

(Zone 5)
BUENA PARK. (Moving to Buena Park March 1-15; will accept any ride in that area; can work any day shift hours). NANCY T. JENNO (1422-37294, Ext. 696, OR 4-3064. 3-5

(Zone 6)
VAN NESS AND COMPTON BLVD., Gardena. FRANK K. McREYNOLDS (3160-30665, Ext. 1818. 1266). DA 4-0581. 3-6

(Zone 8)
CARSON & VICKY, Torrance. ANN OLIVIERI (3120-11999, Ext. 1551). FR 4-6013. 3-8

(Zone 9)
TORRANCE BLVD. & MARIA LUCIA, Redondo Beach. JAMES N. VATTIMO (9350-43200, Ext. 2009), FR 2-3701. 3-9

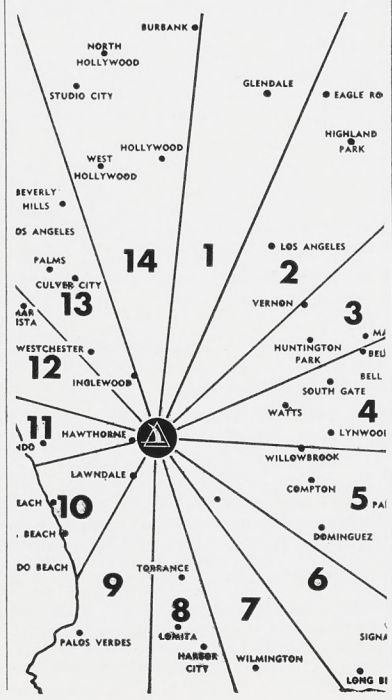
HOLLYWOOD RIVIERA, Redondo Beach. (Desire two additional members in existing 2-man car pool. Prefer Plant 1 or 2 employees.) JUD WELLER (3852-30105, Ext. 2158). FR 5-1077. 3-9

(Zone 10)
PECK or ROWELL & 9th ST., Manhattan Beach. MARION G. POTTER (5142-43593, Ext. 1311). FR 9-4609. 3-10

(Zone 12)
FREEMAN & 103rd or 104th ST., Inglewood 2. I. M. PATTERSON (5260-26431, Ext. 683). OR 4-4032. 3-12

LOYOLA DR. & 93rd PLACE, L. A. 45. (Am interested in forming ride pool from West Westchester.) MIKE LEPPANEN (3870-33838, Ext. 2168, 2385). OR 4-1071. 3-12

Zone Map



Last Chance to Qualify

(Continued from Page 1)

and denied coverage are not eligible.

Second applies to dependents with a disabling condition of illness or injury existent at any time during the 31-day period preceding February 20. Coverage for these dependents does not become effective until 31 consecutive days elapse after date of full recovery.

(Policy definition of disability is explained fully and officially in insurance certificates under the heading of "Deferment of a Dependent's Insurance").

"Insurance of this kind," Waldon remarked, "is a benefit without value until you need it. Then it becomes priceless!"

Many Norcrafters have already attested to the fact, Waldon reports, that this coverage has saved them from financial stress when major illnesses or injuries occurred.

In the first year of its existence, the major med dependent coverage paid over $100,000 in claims.

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 13)
WILSHIRE & SEPULVEDA BLVD., Westwood. GLORIA SMITH (3870-12779, Ext. 2168). GR 9-2833. 3-13

SANTA MONICA BLVD. & SEPULVEDA, Los Angeles (25). (Car pool considered). RICHARD W. KING (3410-33809, Ext. 400). GR 7-1937. 3-13

GREVILLEA & BUCKTHORNE, Inglewood. (Will meet ride at Grevillea & Arbor Vitae or at Buckthorne & La Brea). MINNIE M. LAUER (9380-28072, Ext. 2254). OR 4-1847. 3-13

HILLCREST & HINDRY, Inglewood 1. (Would like to be picked up in front of my trailer at 6:45, or 7:00 A.M., will meet ride at specified area to return home.) THELMA FRANCES ADAMS (5142-43536, Ext. 1311). OR 4-0136

VENICE BLVD. & SEPULVEDA, L. A. (Car pool desired). LESTER LEFF (5940-42795, Ext. 2661). EX 1-3843. 3-13

CENTINELA AND STEPNEY, Inglewood. C. M. VASI (3143-12535, Ext. 454). OR 4-3970. 3-13

CENTINELA & FIELD, North Inglewood. (Other convenient intersection, Centinela & La Brea.) LEONARD SCHOENFELD (5950-42997, Ext. 2498). 3-13

(Zone 14)
BUCKINGHAM RD. & SANTA BARBARA, Los Angeles (8). JULIET L. ELLIOTT (3420-13108. Ext. 626 or 444) AX 3-7591. 3-14

FAIRFAX & SANTA MONICA BLVD., Hollywood. (Car pool considered). IRENE I. LAMM (3400-39997, Ext. 1815), HO 3-4588. 3-14

(Zone 14)
LA CIENEGA & AIRDROME, Los Angeles 35. (1 block east of La Cienega Blvd., between Airdrome and 18th St., and 1 block west of Crescent Heights.) FERN C. MUTH (Air Force, Ext. 1923 or 1921). WE 9-4859. 3-14

7:30 a.m. — 5:15 p.m.

(Zone 1)
WILSHIRE BLVD. & KENMORE AVE., Los Angeles (5). ISABEL JARFAS (3740-14203, Ext. 1611). DU 9-2783. 4-1

SUTRO & SANTA BARBARA, Los Angeles. KAY WALKER (3310-42901, Ext. 421). AX 3-5592). 4-1

(Zone 5)
CARSON BLVD. & OBISPO AVE., Lakewood. (Prefer car pool). OTTO BACHAND (3352-43269, Ext. 2781, 2751, 2752). GA 9-3353. 4-5

(Zone 13)
LIME AND CEDAR, Inglewood. (Going home only, from Northrop Plant 3.) JUDITH ANDERSON (3310-42869, Ext. 1962). OR 7-1889. 4-13

RIDES WANTED

8:00 a.m. — 4:45 p.m.

(Zone 7)
NORMANDIE & 186th ST., Gardena. (Desire ride to work only.) TONI LUND (4510-13614, Ext. 2738). DA 9-6021. 5-7

3:45 p.m. — 12:15 a.m.

(Zone 7)
WESTERN AVE. & 166th, Gardena. LOIS HERMAN (5353-35969, Ext. 2202). 6-7

(Zone 10)
GOULD LANE & STANFORD ST., Redondo Beach. LEO E. GUTHRIE (5161-14631, Ext. 548). FR 9-8203. 6-10

(Zone 14)
CENTINELA OR HYDE PARK BLVD., Inglewood. PEARL FOWLER (5223-42664, Ext. 563). OR 1-2932. 6-14

4:45 p.m. — 1:15 a.m.

(Zone 1)
VERMONT & 8th, L. A. JOHN KUDRIE (5586-22787, Ext. 483). DU 3-1244 8-1

(Zone 5)
EL SEGUNDO & WESTERN, Gardena. LEROY GWALTNEY (5561-42554, Ext. 1280). DA 9-3040. 8-5

(Zone 6)
AVALON & 180th, Victoria Park, Gardena. PAULINE COLE (5504-13820, Ext. 1424. 8-6

(Zone 8)
CRENSHAW & TORRANCE BLVD., Torrance. LUCY E. LE BLANC (5235-39825, Ext. 2002). FA 8-0038. 8-8

(Zone 9)
HAWTHORNE & 182nd, No. Redondo Beach. MARK D. JUSTESEN (5162-14841, Ext. 548). 8-9

HAWTHORNE & SEPULVEDA, Torrance. CHARLOTTE JOHNSON (5621-42686, Ext. 2649). DA 6-0209. 8-9

(Zone 12)
MANCHESTER AND SEPULVEDA, Los Angeles. BUD CHRISTMAN (5538-42687, Ext. 525 or 2185) OR 7-0341. 8-12

(Zone 13)
PACOIMA, VAN NUYS, RESEDA AREA. (Car pool desired). B. M. WATERS (7320-26915 Ext. 2362). ST 5-5192. 8-13

JEFFERSON & HAZELTON, Culver City. GRACE CARSON (5507-19287, Ext. 526), VE 9-8264. 8-13

FREEMAN & ARBOR VITAE, Inglewood. MARY LOU DORN (4110-33339, Ext. 2331), OR 4-2196. 8-13

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — noon Wednesday one week before publication.

FOR SALE

DINETTE SET, 5 piece, oval table; BOX SPRING and MATTRESS, double, $25. PHYLLIS E. VAN DYKE, OR 4-0480. A

ENCYCLOPEDIA, American People, and BOOKCASE, 20 volumes, nearly new, value $250, $100. C. V. CUNNINGHAM. Write to Northrop News, Box 1210. A

BEDROOM SET, walnut veneer, $50. JOE LOUGHMILLER. Write to Northrop News, Box 1209. A

TRUCK TIRES, 2—700x15; 15" TIRE and WHEEL w/w. A. A. BEYER, OR 7-3922. A

FORD COUPE, Model A, $80. L. A. WILLIAMS, FA 8-4938. A

BUICK 1953 4-door sedan, Dynaflow, $1150. LESLIE WALLING, DA 9-3669. A

PIANO, Ivers & Pond, upright, rebuilt, $125. TONY CUSSIMONIO. Write to Northrop News Box 1208. A

RUG, Oriental, and pad, $15; Thor semi-automatic WASHING MACHINE, $25; near new WATER SOFTENER, $50; full size MATTRESS & BOX SPRINGS, $10. W. J. ZELLER PL 3-6193. A

SHOTGUN, 12 gauge, Savage choke, $50. JOE LO 6-6036, 8 a.m. to 4:30 p.m. A

CHEVROLET 1955 Bel-Air, sport coupe, Power Glide. PL 1-3704. A

BEDROOM SET, double bed; STOVE, 1 year old Wedgewood; REFRIGERATOR; automatic ABC WASHING MACHINE. R. D. MILES, PL 9-5588. A

RADIATOR, gas-steam, pilot light, shut-off valve, $45. W. W. KELLY, PL 4-9637.

CAMERA, Bolsey Model B, 35mm, case, flash attachment $35. JOHN H. GRAY, FR 2-2841. A

STEEL GUITAR, fender double neck, $100; large Magnatone GUITAR AMPLIFIER, $100. S. D. BARNES, FR 9-1771. A

MODEL A 1929 roadster, V-8 engine, hyd. brakes. $135. OS 6-1763. A

TRIPLEX, $4,000 down, 3 one-bedroom units, near Northrop. AX 4-7627 after 4 p.m. A

LOT, Topanga Canyon, 40'x140', accept any reasonable offer; STOVE, white table top, $7. EX 8-4007. A

BUILDING, 22'x24' to be moved; WATER SOFTENER. S. B. MICEK. OR 7-1792.

CROSLEY MOTOR 1947, transmission and radiator, running condition, $25; Class B utility RACING BOAT, 11 ft. glassed, $150. OS 5-2212. A

VOLTMETER, Simpson, cost $85, $25; FISHING REELS, Luxor #3, $20; Ru Pacific, 2 spools with line, $25; Sila Flex ROD $10; PHOTO LENS for C-4 Argus, with case, $55. JEROME G. HARKEY. LO 5-2497. 10 a.m. to 12. A

PHOTOGRAPHIC EQUIPMENT: all chrome Komine pan head, $3; Kodak projection print scale, $1; lab thermometer 12", $3; various chemicals, film clips, etc. to highest bidder. HO 4-7747 around 3 p.m. A

CHEVROLET, '49 2-door. $295. GLADYS CUMMINGS, OR 1-8103. A

REFRIGERATOR 1948 Crosley Shelvador, 7 cu. ft., $40. H. J. BLACY JR., FR 2-9794. A

LAUNDRY TUB & PEDESTAL, enameled iron, $5. CARL FELDT. OR 7-4256. A

MOTORCYCLE, 1952 "K" model, like new, reasonable. TROY A. HOPPERT, OS 5-8048. A

CHEVROLET, 1954 Bel-Air, all extras, Power-Glide. $1750 full, 1/3 down. ERNEST WECKBAUGH, OS 6-0758. A

BUGGY-CARBED COMBINATION, pad included, cost $50, $20; speed boat HULL, 14' $250. BRASIE T. CASTRO, PL 3-9935.

CABIN CRUISER, 16', glassed, bait tank and pump, trailer, 40 h.p. Mercury electric starter motor, $950; MOVIE SCREEN, 40x40, glass beaded, with stand, $10. CARL W. PETERS. Write to Northrop News, Box 1201. A

INCINERATOR, good condition, you haul it, $5. IRVING SHERLOCK, EX 8-4032.

PONTIAC 8, 1948 2-door Streamliner, Hydra-Matic, $180; BABY CRIB, $20; CLARINET, $15; electric HEATER/FAN, 1500 watt, $8; electric BROILER, stainless serving tray, $18. OR 8-6548. A

FORD, 1947 V8 de luxe 4-door, $185. A. A. McGOWAN, FR 5-7546. A

FIAT, 1937, '47 engine, complete spare engine (in parts), 2 bodies (hard top and convertible with new top), spare radiator. $150. M. P. BALS. FR 2-0737. A

HOUSE 2 bedroom, near Northrop, large lot with room to build income units; FURNITURE, used approx. 30 days. ALBERT J. BERG. OS 6-7304. A

MODEL "A", stock '29 sedan, solid body, $125. NO 5-0117 (evenings). A

NASH, 1952 Statesman 4-dr., take over payments of $46.60 per month. LESTER C. DICKSON DA 9-5770. A

T.V., 16" mahogany console. $35. B. P. BRADY. 9-5646. A

KAISER, 1949, overdrive, licensed, needs valve job and first gear, $35; four CHINCHILLAS, $15 each, full grown. DAVID GLABE. Write to Northrop News, Box 1203. A

FOR SALE

CHRYSLER, 1951 deluxe Windsor 4-door sedan, $645. NICK GANSEMER, OS 6-5592. A

RANGE, Gaffers & Sattler table top (gas), four burners, white porcelain, timer, $35; two blonde glass top END TABLES, $5 each; blonde glass top COFFEE TABLE, $10. I. L. LOWERY, AX 4-7392. A

DOUBLE BED, Simmons springs, mattress, $20; Baby Line light ash CRIB, springs, mattress, $35; COUCH, makes bed, $12.50. B. J. MELTZER, DA 4-6053.

LAUNDROMAT, Westinghouse, fully automatic, will include hoses and faucets, $50. R. D. MILES, PL 3-9847. A

HEARING AID, Andivox, like new, sacrifice; TOPCOAT, 38 or 40 regular; light grey flannel SUIT, size 40; SHOES, size 7½; HATS, size 7⅛. OR 8-7930 after 6 p.m., all day Saturday and Sunday. A

CRIB, grey Baby Line, embossed head and foot board $20. L. H. ROGERS, FR 4-5286. A

GARBAGE DISPOSAL UNIT, Waste-King, needs new sink attachments. DA 4-4410.

STOVE, Magic Chef, large oven, separate broiler, $75. S. P. BOWER, FR 5-8169. A

ENCYCLOPEDIAS, 1 set (19 volumes), International Library Electrical, including electronic principles and theory, late edition $25. EARNEST K. KAGE, YUkon 62-1528. A

FORD CONVERTIBLE 1951, overdrive, best offer. ROBERT L. BURR. FR 9-6308.

CHEVROLET, 4-banger, full competition engine, $50; 1922 DODGE TRACTOR, 1½-ton truck rear end, $75; Whizzer MOTORBIKE, heavy duty, $75; Spanish GUITAR, $20. BILL WILLIAMS, OS 6-8860, after 3:30 p.m. A

DIVAN, two-piece sectional, grey tweed, used 3 months. $75. FR 5-3521. A

TV, 21" Airline, '54 model, blonde console, $100 or best offer. R. D. SALAS, PL 5-3924. A

BOAT 14' Mobil Craft, fiber glass hull, 12 h.p. Sea King, 12 hr. use, equipped for remote control. $500. R. W. VARIL, FR 5-8647. A

FORD, '49 Tudor, race equipment, $600 or make offer. R. A. GILLHUM, FR 9-8125. A

FORD CONVERTIBLE, 1949, needs top, body work. $125. K. SUSTARSIC, OR 2-0785. A

REFRIGERATOR Coldspot, 1 year old, 9 cu. ft., freezing compartment, automatic defroster, $175. JEANNE BOUL, STate 9-5391. A

BUICK, 1952, 4-door sedan, $650. R. MATHEWS, OR 2-7768. A

SAMOYED DOGS, A.K.C. reg., reasonable. ED PELOQUIN. Write to Northrop News Box 1202. A

FORD Custom 2-dr., overdrive. G. F. EGAN PL 9-7080. A

PLYMOUTH, 1955, small equity wanted, take over payments, or may have it refinanced. MARILYN DUNFEE, PL 6-6594.

GUN, collector's, Remington single action Frontier type, 45 caliber, $70. NORMAN PARHAM, PL 8-0235. A

BUMPER GUARDS, two, fit '33 to '36 Ford, never used, $2. ENGELBERT H. RUSA. OS 5-2852. A

CABIN CRUISER, 1955, 21' Owens, 96 h.p. inboard, sleeps 3, galley, head, complete cover, compass, all Coast Guard-required equipment, $3600. AT 9-2696. A

OLDSMOBILE, 1937, has 1956 tags, $40 or make offer. A. P. TURNER, TO 3-1782.

BEDROOM SUITE, walnut; maroon ROCKING CHAIR; large GAS HEATER; make offer. W. P. MARGRITZ, PL 5-6648. A

REFRIGERATOR Servel gas, frozen food compartment, 8½ cu. ft., $170. D. B. WEILAND, FR 9-5088. A

DINING TABLE, mahogany extension, 4 CHAIRS, $40; BEDROOM SUITE, light wood, waterfall design, $75. B. COOK, DA 4-4518. A

MOVIE CAMERA, Kodak Brownie 8mm, F1.9 lens, $31.50 w/case; 6 FISHING POLES $28; Penn #49 REEL, double drag with line, $17; BOOTS, Gokey Botte Sauvage, 18" size D, cost $50, $20. JOHN E. TELSCH, OR 5-2885. 11 a.m. to 12 noon. A

RADIO-RECORD PLAYER combination, Philco, make offer. R. I. BRIGHAM, FR 9-6143. A

NASH, 1947 "600" sedan, $65; Motorola push button CAR RADIO, $12. OS 5-1847 after 5 p.m. A

TRANSMITTER, Harvey Wells TBS 50 deluxe, matching VFO and power supply, $120. H. W. ALLEN OS 6-8842. A

POWER LAWNMOWER, 1½ H.P. B&S gas engine, Toro 21" clutch, throttle on handle, cost $180, $70, 30 day guarantee. R. LE VESQUE, EX 7-3004. A

FURNITURE, five rooms; STOVE; REFRIGERATOR, 11½ cu. ft. J. H. BUSH, PL 1-9565. A

FOR SALE

TV, 12½" mahogany table model Silvertone, $35. C. H. YOUNGBLOOD. OS 6-7470. A

MOBILE HOME, deluxe, 37 ft. ARTHUR R. OSBORNE, OS 6-3671. A

SERVING TRAY, black lacquer, never used, $5; Silver Fox STOLE, $75; men's heavy OVERCOAT, size 42, $10; FIREWOOD BASKET, $2; Aero GREASE GUN, $2. B. C. BARTON. GR 7-1539. A

DOLL HOUSE, metal 34"x13"x17", furnished, complete $4. L. ALBIN. LO 6-1546. A

CADILLAC, '48 coupe, '56 plates, $450. ANDREW J. GRABSKI, FR 9-1031. A

SOFA, 4 CHAIRS with covers, $25. TO 9-8937. A

FORD, 1940 coupe, new engine, $100. OR 4-6442. A

PONTIAC, 1953 Chieftain deluxe, Hydra-Matic, $995, terms. HAROLD BREWER, WI 7-2808. A

CAMPING TRAILER, sleeps 4, used once. TED KELLY, DU 8-4082. A

PLYMOUTH, 1946 4-door sedan, $225. JOHN TARLAP. EX 6-3056. A

WASHING MACHINE, Thor semi-automatic, 4 years old, $35 or offer. A. LASSOFF, OS 5-4345. A

STUDEBAKER, 1950 Champion, $450. ANN OLIVIERI, FR 4-6013. A

GOLF CLUBS, set Wilson matched, 2 woods, 4 irons, bag, $30; BABY BED, 1-6, and mattress, $15; modern DIVAN, $15. Write to Northrop News, Box 1212. A

MOTORCYCLES, Francis Barnet 200 c.c., $230; Triumph Trophy, Martin swing arm frame, $385. RICHARD W. KING, GR 7-1937. A

DUPLEX, 2 bedroom each, large corner lot, Culver City, fenced, room to build extra units, $19,750; HUTCH, 7' mahogany; 16" TV mahogany; chrome DINETTE SET; RADIO PHONO console, mahogany. A. M. HOLTZ, VE 9-3874. A

CARBURETOR, Carter 4 barrel, never used, for Dodge, Plymouth, V8, $45 or offer. R. K. ANDERSON JR., HE 6-8443.

RANGE, Gaffers & Sattler '55 model, never used, $150 or offer; NASH, 1951 Rambler station wagon, $495; AMPLIFIER, Heathkit W 5-M; and WA-P2 PREAMP, 2 mo. old, $130. Write Northrop News, Box 1218. A

ELECTRONIC TEST EQUIPMENT, 5 Heathkit instruments, one Triplett wattmeter, $96. DA 4-8177. A

RECORD CHANGER, 3-speed Crescent, Sonotone pickup, $25; 45 RPM POST, $3; 6" SKILL SAW, case, $35. W. COOPWOOD, OS 5-3596 after 5 p.m. A

FORD, '55, $185 for equity, take payments, balance $1670, includes '56 plates. H. SNAY, EX 1-4350. A

TYPEWRITER, $20; Portable WIRE RECORDER & RECORD PLAYER, $40; Electric Reel type Penn. MOWER, $17.50; fur CAPE, $5. DENVER HOWARD, OS 5-5829. A

DRIVEWAY GATE AND FENCE, 38"x16', plywood, $20. TED HERZOG, PL 1-2789.

RELAXICISOR, cost $70, carrying pad, belt included, $35. ENGELBERT H. RUSA, OS 5-2852. A

QUARTER HORSE, 10 mo. $65; HOUSE TRAILER, 14', sleeps 5, $665, or best offer. KIRKENDALL, PL 5-6610. A

FURNITURE, $2,000 worth, 5 mo. old, take over payments, equity free. Write to Northrop News, Box 1217. A

CAMERA & PROJECTOR, 8mm Keystone, built-in cord reel, cases, $135. S. W. JOHNSON, PL 4-2504. A

NASH, 1952 Statesman, 4 dr., overdrive, low down, $745 or will take older car for equity. LESTER C. DICKSON, DA 9-5770. A

ELECTRIC RANGE, Philco, $200. TOM POST, WI 7-3256. A

BIKES, boy's, $8; girl's, $14. OS 5-6473 after 5 p.m. A

OSCILLOSCOPE, 3", $20. JAMES DALEY, MA 9-0765. A

CONVERTIBLE TOP, 1939, fits Cad., Buick or Oldsmobile, $25; 1941 Cad. ENGINE and transmission, will exchange, install, $165; 1941 Cad. INSTRUMENT PANEL, with radio, $35; Motorola CAR RADIO, late model, $25. A. D. ADAMS, OS 6-1696. A

GUN, 22 cal. single six Great Western, .45 frame, belt & holster, $75. ROBERT A. ANDERSON. Write to Northrop News, Box 1216. A

FORD, 1952 V-8 4-door Deluxe, overdrive. PL 6-3572. A

BABY BED, springs, mattress, $25; Baby HIGH CHAIR, $6.50; Welsh BABY BUGGY, $17.50. GEO. E. KOPP, OR 1-6469.

DE SOTO, 1940 custom, '49 engine, '56 license, overdrive, $75. J. E. BIRT, OS 6-7734. A

MERCURY, 1955 Montclair Sun Valley Mercomatic, best offer over $2,200. G. E. TESCH, DA 4-1636. A

TV, 16" Kaye Halbert console, $20; Baby BED and TEETER BABE bounce seat, $5. KEN KLIER, FR 9-0706. A

MILLING MACHINE, Diamond M24T complete with Rusnok vertical head, 1" arbor, 8" rotary table, 4" swivel vise, Criterion boring head, collets, end-mill holders, angle plates, cutting tools, $1200. PL 4-1096. A

END TABLES, two, $2.50 ea.; matching LAMPS, $2.50; corner TABLE, $5; FLOOR LAMP; FORD, 1941 sedan, extra set pistons & rings, $70. L. R. WEISS, EX 8-0500. A

FOR SALE

KITCHEN SINK (single) and faucets, $5; BATHINETTE, $7.50. CLAUDE BOYNTON, OR 1-2478. A

BUICK, 1939, '51 motor, '56 tags, $75; apt. size REFRIGERATOR, $25. FR 2-9051. A

CONVERTIBLE, E.M.W. 1952 Sports Club, 6 cylinder OHV, $1500. H. E. SIPE, FR 2-9559. A

MOTORCYCLE, 1952 Harley Davidson "K," $400. R. W. KING, GR 7-1937. A

WASHER, Bendix Automatic; Servel REFRIGERATOR; table top STOVE, all $125. or will sell separately. OS 6-7461. A

PLYMOUTH, 1939 4-door, $50. JOHN SODORA, OR 7-1214. A

BOAT, 14' class D runabout, trailer included, $395; RIFLE, Remington M721, 270 cal., Bushnell 4 power scope, reloading press, dies, powder, few bullets, primers, 2 boxes reloads, $135 takes all. PAUL H. CORDER. Write Northrop News, Box 1219. A

FORD, model "A" 4-door; DIVAN and CHAIR, both make into beds; COFFEE TABLE, STEP TABLES, wrought iron legs, offers accepted. DA 9-6765. A

LAUNDROMAT, Westinghouse, $115. FO 0-3883. A

MOTORCYCLE, B.S.A.; 1954 Gold Star swing arm frame, take older cycle as part payment, $550. L. S. ANTHONY, OS 5-6687. A

REFRIGERATOR, Servel gas, apartment size, $37.50. R. G. ECKLES, OR 1-5046.

CHEMICAL TOILET, Sears, 3 mos. old; Birk-Loc contour CHAIR. OS 5-7993. A

HOUSE, 3 bedroom stucco, less than three years old, full price $8950, sell $50 down, $25 week. TE 4-7305. A

MOVIE CAMERA, Revere 8mm, Ranger model, $50. R. E. SMITH, FR 5-7432. A

FORD, 1950, 2 door overdrive, $450. MADALINE TRACY. DA 9-6981. A

MOTORCYCLE, 1950 Excelsior, 200 c.c., needs primary chain, $100. S. RAYMOND, EX 7-5938. A

ARGUS C-3 flash, case, $35; MANSFIELD 16mm 100 roll F2.5, $35; Cebe I SPEEDLIGHT bat. & elec., $39; V-M 2-speed TAPE RECORDER, $139.50. J. W. HARMON, OR 1-4218. A

WANTED TO BUY

HOME WORKSHOP, recent model De Walt or Comet good condition. J. L. THURMOND, AX 1-0483. message. B

ALFALFA or OAT HAY, one ton or bale. PL 6-4952. B

BASS VIOLIN, good, price depends on quality; send age and price. WARD WRIGHT. Write to Northrop News, Box 1207. B

PING PONG TABLE, folding legs, good condition. C. DIXON, AX 1-4838. B

BABEE-TENDA, used, good condition. HARRY J. BLACY JR., FR 2-9794. B

CRIB, portable; TRANSPORTATION CAR, small good condition, cheap. B. P. BRADY, DA 9-5646. B

BIKE, 20" good condition, reasonable. T. HARWOOD. DA 6-1444. B

VOLTMETER, vacuum tube. JERRY BURKE, OR 1-1992. B

HAND DRILL, electric, ¼ h.p.; woodworking VISE. MIKE, TO 9-8937. B

TRAILER, 20' to 26', solid, good, reasonable, shower preferred. E. J. DANIELS, OR 2-8955 between 10 a.m. and 2 p.m.

COLLIE PUP, under six months old, up to $10. ANTHONY CESARONE, PL 5-2719. B

ENLARGER, to take 35mm to 4x5 negatives, condenser type, must be good condition, reasonable. P. E. BURKE, OS 6-5460. B

PING-PONG TABLE, ½" plywood top, good condition. JEANNE ANDRECHT. PL 4-7810. B

FOR TRADE

ELECTRIC SHAVER, Sunbeam, leather travel case, late model, trade for hand electric vibrator or vented gas wall heater (panel ray type). HENRY H. SACHS PL 6-4952. C

CHEVROLET STATION WAGON, 1954, will trade for ½-ton Chevrolet or Dodge pick-up, clear or nearly clear. V. L. SEYFRIED. NE 5-3921. C

GOLF CLUBS, matched Lyons, for 30/30 carbine. JOE NIESSEN, WHitehall 2-2246. C

CARBURETOR, 4 barrel Holly, trade for 1955 Ford Fordomatic two barrel Holly carburetor. STANLEY D. DILS. OR 4-0944.

EXOTIC BIRDS. DON McCULLOCH, OR 2-2434. C

WATCH, white gold Hamilton, set with 2 diamonds, trade for rug approx. 11'x14' or tires fit for '49 Ford; 2 interior DOORS 30", trade for small table or chairs. E. S. McGOVERN, OS 5-7414.

FOR SALE OR TRADE

TRAILER, 1950—35' Ironwood, 2-bedrooms, bath, furnished, 17" TV, cash and terms or trade for equity in house, consider furniture. THELMA F. ADAMS, OR 4-0136 after 6 p.m. M

HOUSE, 3 bedroom, 2 bath, w/w carpet, G.I. equity, $1750 or trade for late model car, Torrance. Write Northrop News, Box 1214. M

FOR SALE OR TRADE

BUTTONHOLER, Singer, $10 or trade for White buttonholer. Write to Northrop News, Box 1205. M

HOUSE TRAILER, equity in 1955 A.B.C., 50' 3 bedroom, sell or trade for equity in 3 bedroom home. ROBERT W. COULTER. Write to Northrop News, Box 1213. M

BED, full size; 2 twin size Simmons metal BED FRAMES; large WARDROBE CLOSET, trade for Mr. and Mrs. Chest or vac. cleaner; swivel top TV TABLE. JAMES W. GAGNON, PL 8-0835. M

TRAILER, 1955 Rollaway, equity $2496, sell $1500 cash or trade for 27' trailer, 1950 model with toilet and shower. Balance on trailer $2300 at $52 per mo. H. WILLIFORD, OS 5-8587. M

ADDING MACHINE, Remington-Rand; R.C.A. WIRE RECORDER; G.E. 1.5 h.p. 110/220 volt MOTOR; R.C.A. 40-watt power AMPLIFIER; need 6-chair blonde dinette set. W. S. COOK, DA 6-2467, evenings. M

DODGE, 1953 ½ ton pick-up, sell or trade for '52 or '53 Ford Ranch Wagon or 2-door. OS 6-7461. M

OUTBOARD MOTOR, 5 h.p. Scott Atwater, Bail-A-Matic, $170 or trade for 15 h.p. or larger. J. L. GREEN, DA 3-1732 A

BUICK, 1955 Special 4-dr. Riviera, sell or trade equity for 1951 Plymouth. DA 4-8356. A

FREE (To be given away)

HEDGE, 40' long, grow to 6' in height, bring replacement fill dirt and dig it yourself. ENGELBERT H. RUSA, OS 5-2852. D

MODEL AIRPLANE manufacturing supplies. GORDON D. MADISON. Write to Northrop News, Box 1215. D

PUPPIES, to good home. L. OZENNE, OS 6-9667. D

RENTALS OFFERED

HOUSE, 2-bedroom, furnished, w/w carpeting, fenced, garbage disposal, available March, $115 month. ARLETHA YUEN, DA 4-4831. E

BOARD AND ROOM, T.V., lunches, $18 week. D. B. DAVIS, FR 2-9867. E

APARTMENT, 2-bedroom, $85 month, utilities paid. OS 6-8004. E

SLEEPING ROOMS, private entrance, any shift, men only, walking distance to plant, $7 per week. JOHN E. TELSCH, OS 5-2885. E

HOUSE, 2-room, unfurnished, North Inglewood, water paid, private yard, $40 per mo. E. W. BISHOP, OR 7-8519. E

HOUSE, furnished, 2 bedrooms, den, close to plant, share with owner, business couple preferred, no children or pets. $85 month. Write to Northrop News Box 1206. E

SHARE HOME T.V., maid service, close to Northrop, with young man, $45. D. DUNGAN OS 6-4008. E

FURNISHED ROOM, night or day shift man, $8.00 week. OS 5-5850. E

APARTMENT, new 1-bedroom, garage, $65 (unfurnished except stove), near Northrop; prefer quiet working couple. GEORGE E. HARRIS, OS 6-7860. E

SHARE HOME, woman, 2 bedroom and den, with working woman, Imperial near Western. PL 4-5626 after 6 p.m. E

SHARE HOME, 3-bedroom, Morningside, kitchen privilege, TV, garage. PL 4-8289. E

HOUSE, small 2-bedroom unfurnished, Venice, fenced yard, 1 or 2 children OK, ref. req. C. A. WINTERS, EX 9-3897. E

DUPLEX, 2-bedroom, natural woodwork throughout, dual thermostat heating. A. M. TIBERIO, OS 5-4875. E

RENTALS WANTED

APARTMENT, 1-bedroom, utilities paid, near El Camino College or walking distance from Northrop, Plant 3, not over $60 month. EVELYN ANDERSON. NE 2-0164, after 6 p.m. week days. F

CHILD CARE OFFERED

CHILD CARE, have girl 3, 2-5 years, fenced yard, hot lunches, toys, naps, snacks, day or evening. BRASIE T. CASTRO. PL 3-9935. G

CHILD CARE, from age 2½ up. DAvis 9-1514. G

CHILD CARE, one child 2 to 5 years old, large fenced yard, breakfast and lunch. Parents furnish transportation. R. E. SMITH, FR 5-7432. G

CHILD CARE, ages 3 to 10 yrs., lawn play yard, fenced, play equipment, near school, day or night shifts. OS 5-7993.

CHILD CARE WANTED

BABY SITTER and light housekeeping, nights, live in. BOBBIE S. NOBLE. Write to Northrop News. Box 1211. H

LOST

RING, man's, black onyx, small diamond in center, left in Administration Building on wash basin January 19, about 7:45 p.m. JAKE GOLDBERG. OS 6-5421.

5-YEAR PIN, Plant #3. R. L. BRIGHAM, FR 9-6143. L

PERSONALS

HOME OFFERED for girl in exchange for care of my children while I work days. JEANETTE D. BRADY, OR 2-8132.

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
League play now in progress Mondays, 6:30, Fremont High School; Thursdays, 6:30, John Muir Jr. High School.

BIBLE STUDY,
Meet daily, Plant I, east mezzanine conference room, 11:15 a.m.; Plant II, M.W.F. 12:00 conference room M1-B1, T.Th. 12:30, conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting, 2:30 p.m.

BOWLING (days), Wayne Chamberlin
BOWLING (nights), Garland Steiner
Winter leagues now in progress.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m. Next—February 28.

CAMERA CLUB (days), Howard Linnenkohl
Meet 1st & 3rd Friday evening, 7:30 p.m. Next—February 17.

CAMERA CLUB (nights), Gene Beck
Meet 1st & 3rd Saturday, 7:30 p.m. Next—February 18.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30 p.m. Next—February 15.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next—February 22.

GOLF, Andy Titus
GOLF (nights), Pete Lower
Three-Club Tournament February 26, Fox Hills. Applications available in Personnel Activities.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

MIXED CHORUS, Florence Graveline
Meet every Tuesday evening, 7:30 p.m.

MODEL CRAFT CLUB
Meet 1st and 3rd Monday, 7:30 p.m. Next—February 20.

MODEL RAILROAD CLUB, John Felder
Meet every Sunday morning, 9:00 a.m., and every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays. Next—February 27.

RADIO CLUB
Meet 3rd Tuesday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—February 18.

SKI CLUB, Howard Fletcher
Meet every Thursday evening, 7:30 p.m.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Next—February 28.

EXCLUSIVELY FOR THE LADIES

BASKETBALL, Pam Thompson
League play Alondra Park Gym, Tuesday evenings.

BOWLING (days), Lee Hopkins
Winter leagues now in progress.

INTERIOR DECORATION
New session of weekly classes in lampshade making beginning on Thursday, February 16 at 7:30 p.m.

KNITTING
Meet at Clubhouse each Monday evening at 7:30 p.m. beginning February 20.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet Tuesdays, 7:00 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Hetty Horner
Meet first and third Thursdays, 7:30 p.m.

SPORTS *The Northrop News*

TOASTMASTER TRIALS SET

CLUBS IN AREA CONTEST

MTF GOLF —. Richard M. Balman, Florida MTF Tool Crib Norcrafter, is pictured with golf trophy awarded him at the Melbourne Country Club, Florida, for runner-up championship win in 1955.

Close to 200 Toastmasters, their wives and guests will gather on February 18 for the annual Area 12 TM speech contest, according to Area 12 Publicity Director Ken Davidson.

The dinner meeting will be held at Scully's restaurant, 48th and Crenshaw. The winner of the contest will advance in elimination trials toward the Toastmasters' International Speech contest, which will be held next August in Detroit, Michigan.

The eight TM clubs which comprise the Area include both Northrop TM clubs, Northrop #212 and NorAir #1398; Westchester #869; Inglewood #114, Hawthorne #1246; Civil Aviation Authority #1004; AiResearch #401; and the newly-organized North American club. One representative from each club will compete for the area championship. Representatives were chosen by club speak-off trials.

A. J. "Tony" Gayou, nights, will represent the NorAir #1398 club and Lorne Bristol will try for honors for the day shift.

A number of Toastmaster dignitaries are expected to attend, headed by Jack Haynes, president of Toastmasters International. Others are Paul Hornaday, governor of District One; Al Hallquist, executive lieutenant governor of District One; Norcrafter Jim Van Dorn, lieutenant governor for District One; and Bob Bromley, governor of Area 12, who will preside.

Northrop Toastmasters have expressed high hopes that their club representatives will place in top spots in the contest. NorAir #1398 President Ken Davidson took second in last year's area contest and other Norcrafter TM's have consistently shown superior style in other area contests. Dave Leedy, day shift TM president, recently won the area Humorous speech contest—Norcrafter Ward Newton had taken the title the previous two years.

Both clubs are currently involved in membership drives and Presidents Ken and Dave invite all Norcrafter men to attend any of the club meetings.

Hoopster Nod Given NRC Fems

Calling all girls—!

The whistle has blown signaling the start of the Los Angeles County Women's Industrial Basketball League, and the NRC girls are currently battling for top spot with ladies' teams from Douglas, North American and Ai-Research.

Games are played every Tuesday night at Alondra Park Gymnasium, located on Redondo Beach Boulevard between Crenshaw and Prairie. Games start at 7:30 p.m.

The next league game will be February 21, when Northrop's team will play the Skyqueens from Douglas Aircraft.

Pam Thompson, Basketball comish, advises that there are several playing spots available for any Northrop ladies interested.

RADAR HANGAR HOP—. RHH dance committee members from 5515 and 5520 departments are pictured, seated left: Hal Tobey, Spud Webster, Virgil Nolan, Madelyne Cristelli, Henry J. Hooton, chairman; Lois Woods, Grace Carpenter. Standing: Aaron Vance, Dean Harding, Jim Lavender, Robert J. Weeks. Hop will be held February 25 at Western Avenue Country Club. Byron Harkins and his Famous Five will provide music, Ducats are $1.25, available from department clerks or at door. Garb will be semi-formal and dancing will begin at 9:00 o'clock.

G-M Folks Hear Martin – Sports Cars in Rally Run

The lure of gold is calling members of the Gem and Mineral and Sports Car clubs.

The Gem and Mineral folks will gather on February 22 to hear an illustrated lecture by Verl Martin titled "Beyond the Picacho", which tells of lost gold ledge; three new, hitherto unknown, gem and mineral finds; and more about the seldom-traveled desert area of Imperial County. The meeting starts at 7:30 p.m. in the NRC Clubhouse. Members will also learn the date, destination, and goals of the next G&M field trips.

The gold the Sports Car club is after is the gold of the Sixth Annual Don Diego rally cup. Rally date is Sunday, February 19. The San Diego Sports Car Club sponsors the event and two Northrop teams have entered. One NRC team includes C. K. and Betty Enoch, Bill and Sylvia Hanna, and Harold Guess and Jack Kirkpatrick. The other team lists Doug Hugill and Harold Knopp, Bob and Irene Walters, and Dick Flude and Tommy Clouse.

Sports Car Note: Norcrafters Harold Guess and Jack Kirkpatrick placed first in the January 29 El Primero Del Amo rally sponsored by the San Gabriel FCCA. On the same day, C. K. Enoch and Noble Bishop placed first and second, respectively, in the Thunderbird SCC gymkhana in Pomona, and Mary Bishop placed first in the women's class and high overall.

SKIN DIVING TROPHIES—. Recent year-end award banquet for NRC Skin Diving club netted trophies for, left: Ted Thompson, novice award; Robert Skipper, monthly award; George Branch, club comish, and Glen Combs. Latter hold awards won by Glen's brother, Tom, diver of year, now in U. S. Navy.

CD Tie-in Topic Next Radio Meet

By HAL HUNSBERGER
President
Northrop Recreation Club

The big part that many ham radio operators played in maintaining communications during the recent local flood dangers is graphic illustration of the valuable assistance these hobbyists can give during times of disaster.

In line with this thinking, the next meeting of the NRC Radio Club — on February 21, Tuesday, at 7:30 p.m.—will feature Jerry Baker, Northrop Civil Defense coordinator, who will speak on the participation of ham operators in the CD program. Jerry will also assist members in making plans for a Northrop-manned CD ham unit.

In addition, Al Devenish, Electronics department Norcrafter, will have an interesting talk on ham radio aimed at both the novice and the old timer in the field.

Paul Serafin, club comish, stated that "—all YL's, XYL's, and junior ops are welcome"—

★ ★ ★

We were sorry to hear of the resignation of NRC vice-president George Hanna—George has done an outstanding job at Ontario this past year.

We are all happy to welcome Steve Douglas in the vice-president pro tem spot at the facility.

★ ★ ★

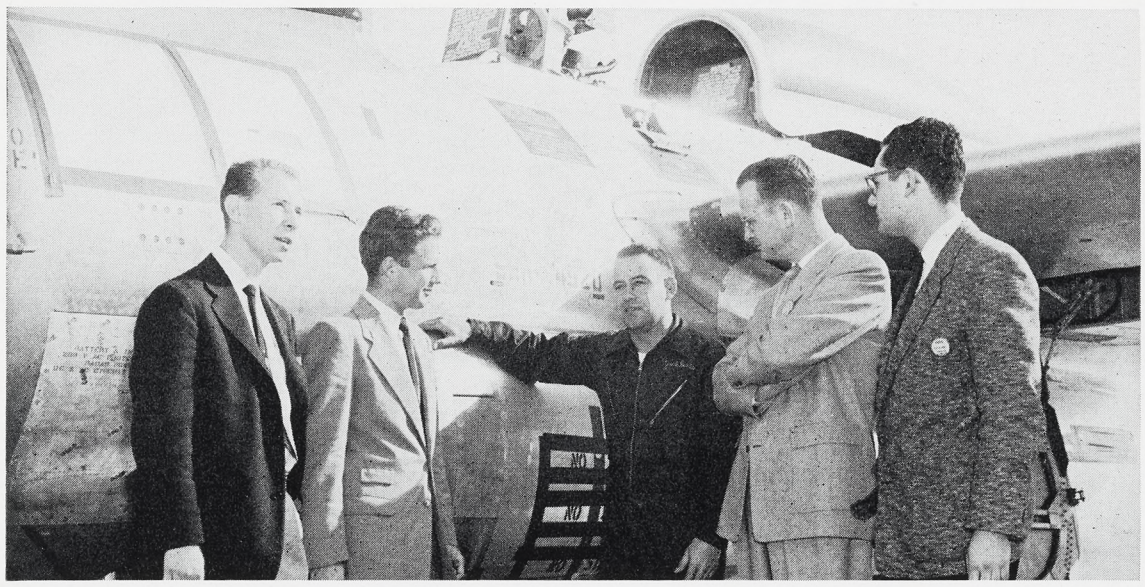
A recent note from Roy Stahl, Bible Study commissioner, invites all Norcrafters to participate in the many Bible Study classes which meet every day somewhere in the plants.

Primary purpose of the meetings is a non-denominational study of the Bible. Roy states that secondary benefits are the the fellowship and encouragement experienced by the members.

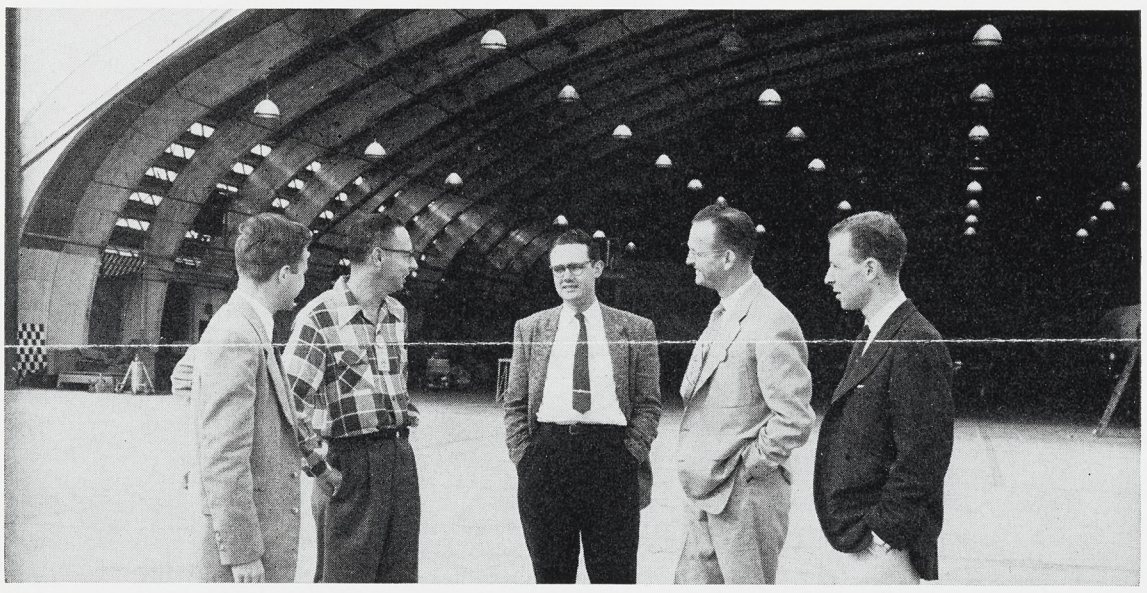
The Good Time Table has meeting dates, times, and places. Personnel Activities office has additional information.

THE Northrop Scene BY DAY AND NIGHT

MIT Students at Palmdale, Muroc

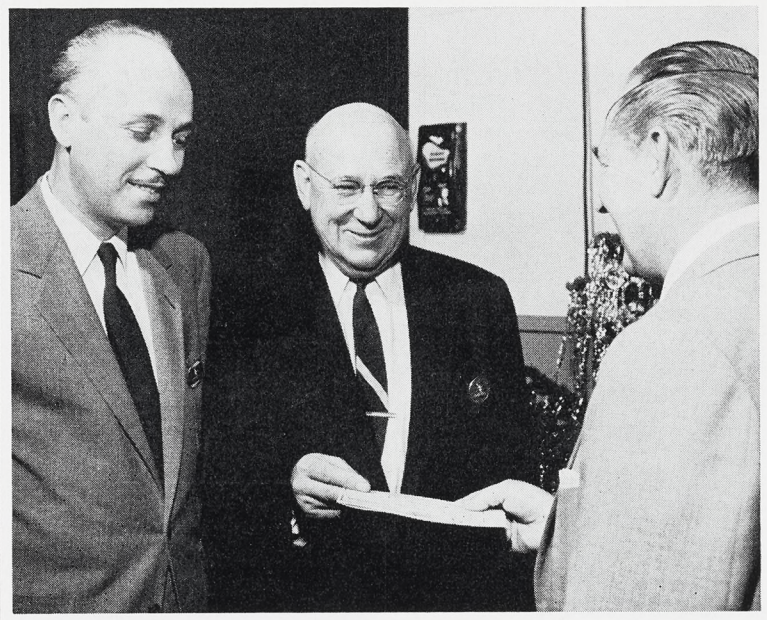


COOPERATIVE STUDENTS from Massachusetts Institute of Technology have been working alongside Norcrafters in Engineering division, and recently visited Palmdale and Edwards. Here they are shown with their Northrop guides at Palmdale, as Jack Farley, chief, Production Flight Test, discusses his side of the picture. Students are Richard Bruce and Richard Bohlen, left, and Larry Lorah, right. Farley is in center, then W. G. Wheldon, Fluid Dynamics, guide for day.



AT EDWARDS, with large Northrop facility hangar in background, the M.I.T. students were pictured as they talked with Liaison Engineering's Larry Wisken, who is assigned to Muroc facility. Under cooperative plan, students from M.I.T. work in industry for specified period—usually six months—and then return to school studies. Plan admirably mixes theory with practice for them.

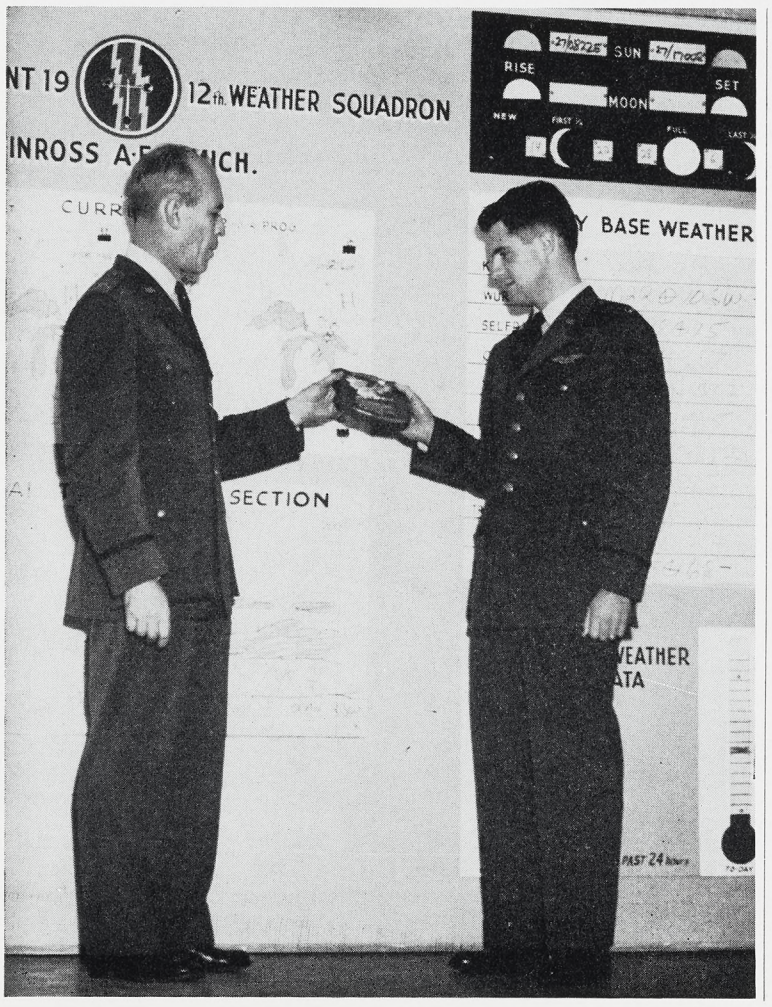
Award for Ingenuity



SUGGESTION AWARD of $511 recently was presented to George Bechtel, center, of Advanced Production Control, for his idea suggesting ingenious paperwork system for his department. Factory Manager C. B. Spencer, right, personally presented check to George, with Don McNeal, Manufacturing Control superintendent, present, adding division approval.

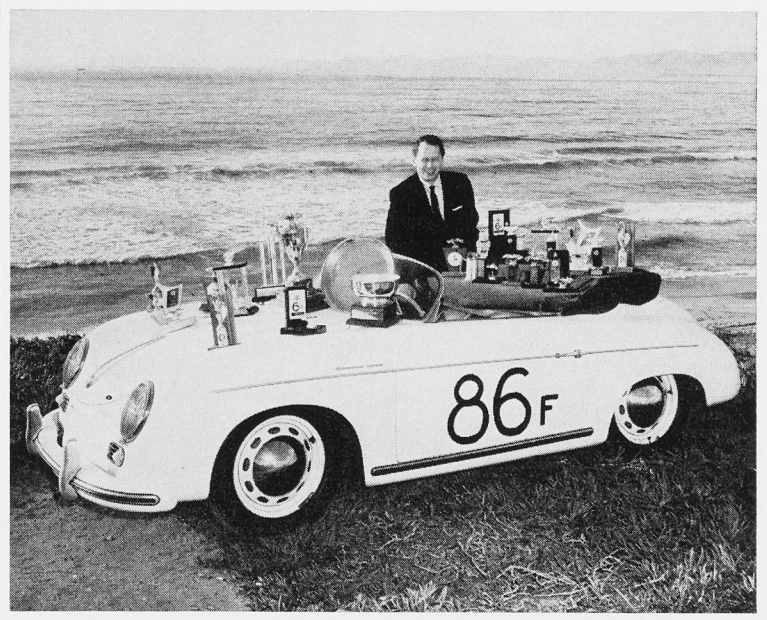
Airmen Cited by ADC

AIR DEFENSE COMMAND named these two airmen as monthly winners of Command's "F-89D Maintenance Airman of the Month" competition. Left: Staff Sergeant R. E. Powers, 58th FIS, Otis AFB, Massachusetts. Right: Tech Sergeant C. R. Jarvis, of 84th FIS, Hamilton AFB. Award is made for outstanding performance of duties in maintenance.



Point with Pride

PLAQUE, inscribed "We Point With Pride", was recently awarded to Lieutenant Martin W. Tingstad, 439th Fighter Interceptor Squadron, for calm, sure action in emergency. Presenting plaque is Brigadier General Benjamin F. Webster, commanding general, 30th Air Division, left. Tingstad made safe landing in F-89D when one engine malfunctioned at low altitude, low speed.



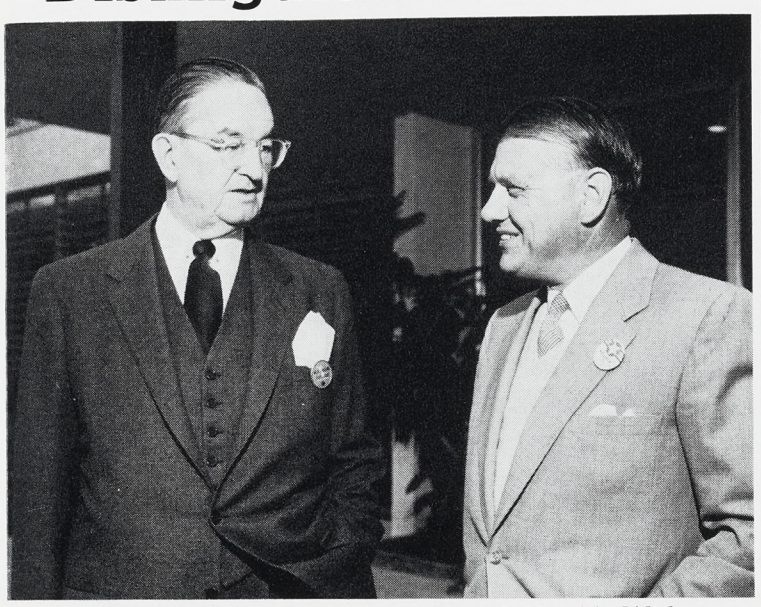
FAST COMBINATION of Dale Johnson, Northrop LAX facility experimental pilot, and his German-built Porsche Speedster have racked up the impressive total of 24 trophies in a scant nine-month period. Johnson races the European-type courses in the under-1500 cc production class and is currently high point man toward winning the National Sports Car Drivers' perpetual trophy. Twelve of the trophies are first place wins. One more first gives Dale NSCD title.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, February 29, 1956

DELIVERY VIA AIR SPEEDS COMPUTER

Distinguished Visitor



AMERICAN Minister to Moscow, Walter M. Walmsley, right, had first look at an aircraft plant when he visited Northrop recently. Walmsley is shown with President Whitley C. Collins. Invitation to tour Hawthorne facilities was made to the Minister when it was learned he was in the Southland on vacation.

Building Time Table

The Northrop News presents the new building time-table, released to this paper last week by Ed Petoskey, director of Corporate Planning.

First construction steps have already been taken. The new buildings will include a 250,000-square-foot scientific engineering research center, one of the world's most advanced. Cafeteria service will continue "business as usual" with the old cafeteria serving meals until the new one is ready.

Site preparation
- Engineering Test Building 1/28/56*
- Cafeteria 2/11/56
- Engineering Office Building 2/11/56
- Wind Tunnel 2/11/56

Foundations
- Engineering Test Building 2/ 4/56
- Cafeteria 2/25/56
- Engineering Office Building 3/ 3/56
- Wind Tunnel 2/18/56

Steel
- Engineering Test Building 4/28/56
  - (completion) 5/19/56
- Cafeteria 9/22/56
  - (completion) 11/24/56
- Engineering Office Building 6/ 2/56
  - (completion) 7/14/56
- Wind Tunnel 3/24/56
  - (completion) 4/28/56

Roof-deck, Siding
- Engineering Test Building 6/ 9/56
  - (completion) 7/21/56
- Cafeteria 10/13/56
  - (completion) 12/ 1/56
- Engineering Office Building 7/21/56
  - (completion) 10/27/56
- Wind Tunnel 3/24/56
  - (completion) 4/28/56

Interiors complete—ready for occupancy
- Engineering Test Building 10/13/56
- Cafeteria 3/16/57
- Engineering Office Building 4/13/57
- Wind Tunnel 7/ 7/56

*All dates are for the weeks ending. All dates signify start of the project unless otherwise noted.

AF District Announces Bid Awards

Three contracts totaling a little more than 1.5 million dollars have been awarded to Northrop in recent weeks, Los Angeles Air Procurement District officials have announced.

In addition, it was learned late last week, Northrop has received letters of intent from McDonnell Aircraft for sub-contract work amounting to approximately 13 million dollars.

The three firm contracts announced earlier by LAAPD are broken down as follows:

One, totaling $383,870, is for fabrication of parts and pieces for the modification of F-89 aircraft.

A second, in the amount of $887,216, covers parts for modification, kits, tow reel installations, miscellaneous, and engineering changes to existing contracts.

The McDonnell letters of intent cover sub-contracts on a classified project, Sub-Contract Relations announced.

The contracts and the letter of intent, Customer Relations personnel said, are in addition to the existing major contracts, such as those on the F-89, guided missiles, and Boeing, Lockheed, McDonnell, and North American sub-contracts.

They are the routine result of the continuing search for new business carried on by Customer Relations division representatives.

Share the Ride

(See Page 3)

LATEST EQUIPMENT FOR ENGINEERS FOR USE ON LRI PROGRAM

Norcrafter engineers engaged in developing the long range interceptor program now have the help of a new electronic "brain" — a 11,000-pound computer flown here by chartered airliner from New Jersey.

Computations which formerly took up to 12 years can be solved in a matter of hours with the new computer, its manufacturer, Electronics Associates, Inc., has stated.

A Slick Airways C-46 brought the delicate equipment to Northrop Field. Uncrated, the equipment was wrapped in blankets and soft padding for its journey from the east coast.

Immediately upon its arrival it was moved directly to Northrop's computing center in Plant Three. There was no need for unpacking or reassembly.

Addition of the new equipment to the computing center increases the company's total computing capacity by about 20 per cent. The new equipment is of the precision analog type, and consists of eight console-like units.

The computer is the second large installation of Electronics Associates computing equipment acquired by Northrop. A previous shipment received a few weeks before was assigned computations relating to guided missile projects and other work of secret nature the company is conducting for the Air Force.

Awaiting the arrival of the new computer at Northrop Field were

SEE PHOTOS, PAGE 2

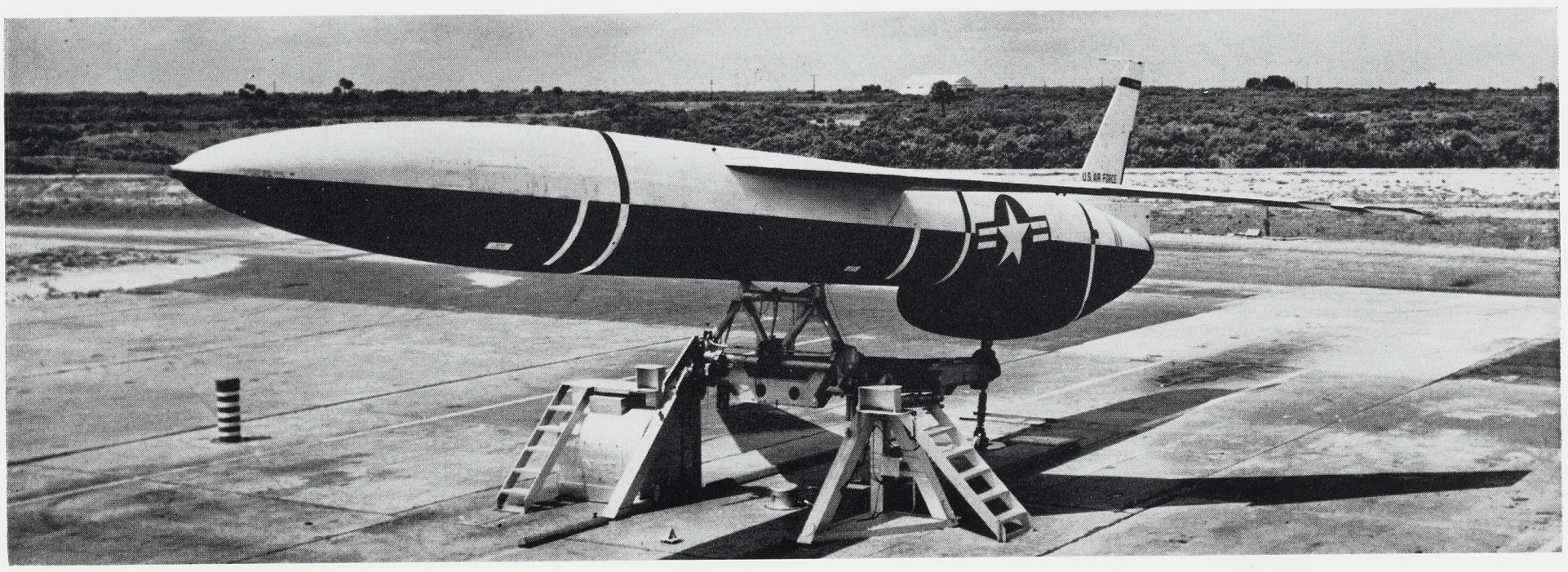
Roy Jackson, chief analytical engineer; Ray Gardner, LRI weapon systems project engineer; Lee Ohlinger, chief, Computer Services; and John O'Sullivan, facilities engineer.

"The new computer is typical of the modern, high speed computing and data reduction equipment available to Northrop engineers who are working on projects like the LRI and missiles," Ohlinger said.

The LRI program, on which the computer will find its chief use, ranks high on the secret list. It involves the design of a new type of air defense airplane capable of traveling over long distances to detect and destroy enemy aircraft. Northrop is competing with North American and Lockheed in the design of the LRI, and recently hosted the LRI Evaluation Group (see Northrop News, February 1).

The Snark - - - - !

FIRST U.S. intercontinental guided missile to be unveiled by U.S. Air Force is Northrop Snark SM-62, shown on cleared pad at Patrick AFB, Florida. Snark is being tested there. A pilotless bomber capable of delivering atomic warhead over trans-oceanic distances, Snark has been developed under USAF contract. Northrop research and development in guided missiles began 10 years ago. Snark project has been under tight security wraps — this photograph is first release allowed to date to the country's press.



Palmdale

ELECTRONICS—Northrop-Palmdale for some months has been conducting extensive Industrial Training classes in electronics; possibly the most extensive such program being sponsored by any major airframe company in the U.S. Instructor G. W. Blaisdell, standing, discusses theory with, from left — Carrol DeMille, John Bure, Bill Thomas, Don Sgro and Wes Fergusson. Lab work follows theory. Approximately 80 Norcrafters have completed course; graduates "trouble shoot" on F-89 line as technicians, crew chiefs.

Wire Stripping Adapter Big Conservation Step

Wire stripping became a difficult proposition when plastic coating replaced cotton braid on the miles of "spaghetti" that are used on modern high-speed aircraft like the Scorpion.

But the difficulties are nearing an end, with the development of efficient rotary wire-stripping attachments by a Manufacturing Engineering Methods Norcrafter, Ralph Baker.

It is necessary to strip the insulation from wire at points to be soldered or terminated, and the process must be performed cleanly to insure proper operation later.

The Ideal automatic rotary stripper had been used successfully on wire with cotton braid insulation, but when specs called for poly-vinyl fibre glass-nylon combination covering, there were headaches.

The main trouble, it was discovered, was that the wire was not always perfectly centered within the insulation. The stripping then would often burnish, fray, or otherwise damage the vital core. Considerable hand re-work resulted.

Other companies had tried, without apparent success, to use blunt, carbide-tipped cutting edges on the blades of the stripper. First efforts here followed the same pattern . . . until Baker developed a wire size-dialing attachment.

Known as the "Dial-A-Gage", the adapter allows the operator to set the equipment to any of 12 different gages of wire (on newer models being developed to 16).

It is unnecessary to have different machines for different sizes of wire, and a change now—from one wire size to another — is accomplished in seconds.

The principle of the Dial-A-Gage reduces the area between cutting blades to the minimum necessary for the type of wire being stripped. There is less play in the wire between cutting edges and the result is a clean stripping job.

Early results prompted both Northrop and Air Force Quality Control recommendations for the use of the new method as an effective conservation measure. Hill AFB and Wright Field reps also recommended the equipment.

BY AIREPORTER

Twelve Ideal strippers are being adapted at Northrop with the Dial-A-Gage. Potential savings from the 12 machines, under normal production, may amount to $50,000 a year!

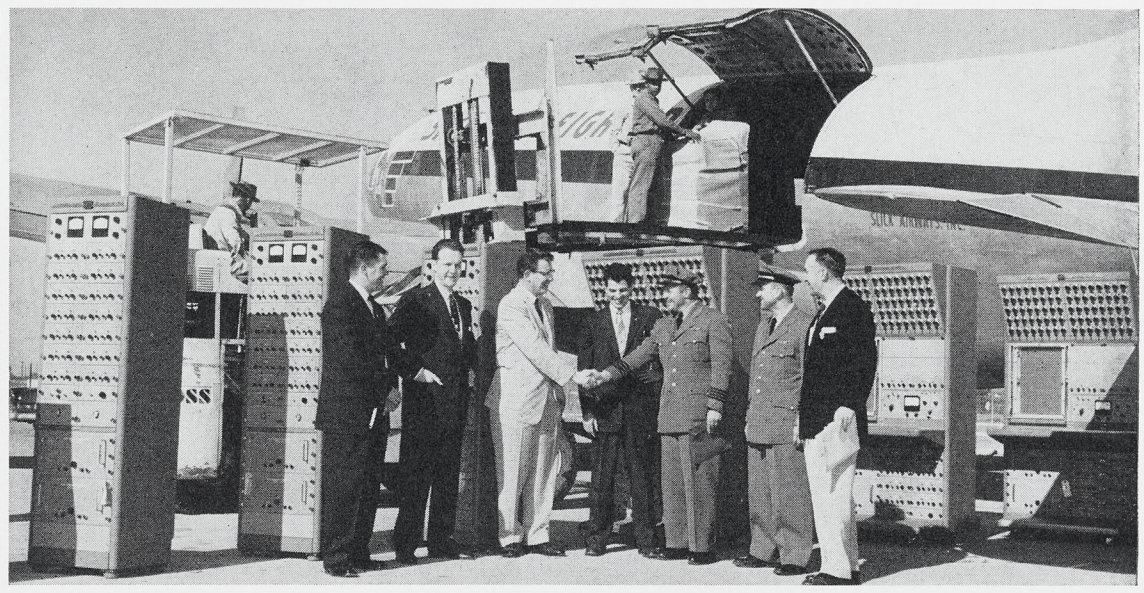
(See photos, page 6)

And there is further potential —in the field of automation. Plans are being formulated by Manufacturing Engineering Methods to combine the automatic stripping method with the existing Duramatic automatic wire marking machines to complete a cycle of almost fully automatic operation in one section of Electrical.

This automated operation would pull the wire directly from the spool; measure it; mark it on two sides; count the number of wires needed; cut to length; and then strip them.

Manufacturing Engineering Methods extends a goodly share of credit for the development of the wire stripper equipment to Mechanical Maintenance Norcrafters, including Ray Myers, Wayne Cowell, and Johnny Cote. All helped in the fabrication of adapting equipment.

The development is being sought by a number of industries, John Oliver, of the Associated Products office, reports. He is currently negotiating to license its manufacture.



NEW ELECTRONIC "brain" arrived here recently via air shipment, and was put to work almost immediately on computations regarding advanced airplanes like LRI. Roy Jackson, chief analytical engineer, shakes hands with Captain Bala Martin, Slick Airways pilot, to express appreciation of safe delivery. In photo: Doug Howard, Slick sales rep; Lee Ohlinger, Computer Services chief; Jackson; Ray Gardner, LRI weapon system project engineer; Captain Martin; First Officer Earl Drew; John O'Sullivan, Engineering.

R.M. Cooper Re-elected Credit Pexy

Northrop Credit Union directors this month re-elected R. M. Cooper, chief of Materiel Services, as its president for the year.

Incumbent vice-president Dave Stadler, manager of Personnel Administration, and secretary-treasurer Walt Gage, manager of the Credit Union, were also re-elected.

Shortly after election of officers, directors announced a two per cent dividend for 1955.

On the 1956 board of directors of the Credit Union—in addition to the officers—are John Dew, Outer Wing Installation; Keith Thurston, Engineering Administration; Hugh R. Watson, Finance; and Frank Ziegler, Systems Administration.

Mary Delaney was appointed assistant secretary-treasurer; Mary Bennett, assistant treasurer; and Betty Rodesch, cashier.

R. T. Clements, executive advisor to the vice-president, Finance, was re-elected chairman of the supervisory committee. Serving with him this year will be George Chalmers, manager of Industrial and Plant Engineering; and W. W. Harter, Structures.

Lee Rondot, assistant superintendent of Production Engineering, nights, was elected chairman of the credit committee, which also includes A. B. Odom, F-89 Planning; and Vern Vanderville, Electrical and Instruments.

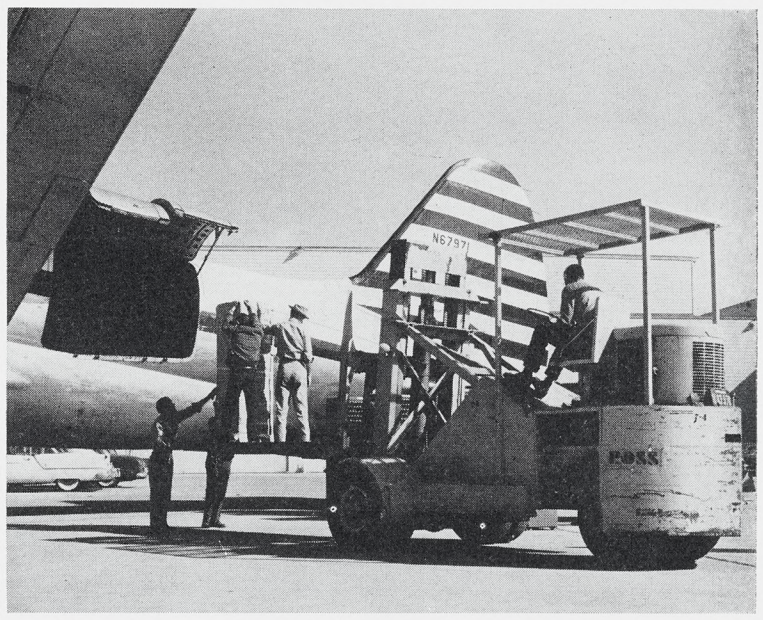
Alternate members of the credit committee were also named, with two members from the night shift and four from days.

The former are Woody Jones, assistant superintendent, Production Fabrication, and Scotty McKenzie, night manager of Industrial Relations.

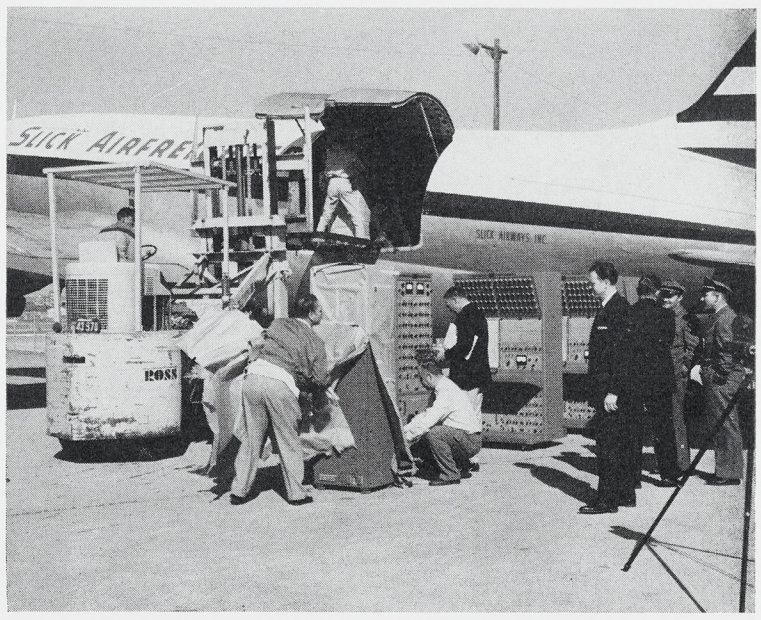
Day shift alternate members—Joe Carver, Budget Administration; J. M. Duffy, Hydraulics and Plumbing; F. L. Muhl, F-89 Planning; and Dave Trimble, general foreman of Production Assembly.

At the end of January, the directors have disclosed, the Credit Union has gross assets topping the million-dollar mark. Its 9132 members have just under a million dollars on deposit, and 2786 members had $561,913 on loan. Although the number of depositors declined slightly in 1955, total deposits were up, the figures showed.

The Credit Union is currently lending funds for the purchase or refinancing of automobiles.



MAINTENANCE CONSTRUCTION Norcrafters were on hand to unload valuable cargo. At left, Charlie Holden, Elmer Eide (behind computer), William Burrow, and Leadman Hunter Withers help lower computer. John Champion is operating the mule. Bill Hall and Ernest Sykes were other Maintenance personnel assisting in unloading. (Story, page 1, has details.)



COMPUTER UNITS were immediately unwrapped under Ohlinger's direction, taken to computing center.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 13

Published every other Wednesday by
INDUSTRIAL RELATIONS DIVISION, NORTHROP AIRCRAFT, INC.
JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
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News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 4)
IMPERIAL HWY. & FIRESTONE BLVD., Norwalk. (Room for 5 passengers from Norwalk and vicinity). CAPELA (5504-21043, Ext. 1424). 12-4

(Zone 5)
NORTH LONG BEACH. (Room for four riders in area of South & Cherry, North Long Beach). GEORGE C. CLEMENTS (5251-19826, Ext. 1334). GA 3-3474.

(Zone 7)
NORMANDIE & 220TH ST., Torrance. (Route: Normandie to 186th, 146th & Western, 135th & Budlong, El Segundo to plant). C. L. FITZJARRELL (5507-14710, Ext. 624). FA 8-2423. 12-7

(Zone 9)
TORRANCE AREA, Torrance. (Desire to share ride with person or persons living in Ellinwood). G. W. JACKSON (3410-13104, Ext. 2356), FR 5-8779. 12-9

7:30 a.m. — 4:15 p.m.

(Zone 5)
MILLER & LA PALMA or Miller and Orangethorpe, Buena Park. (Down Orangethorpe to Atlantic to Artesia to Plant Three to Plant One). BEN LOVERIN (8100-32252. Ext. 1518 or 1519), JA 7-4378. 13-5

(Zone 14)
BEETHOVEN & VENICE BLVD, Los Angeles (66). JOAN SUMMERS (1421-12201, Ext. 1493 or 2393). EX 7-1047. 13-14

8:00 a.m. — 4:45 p.m.

(Zone 7)
AVALON & LOMITA, Wilmington. (Can pick up on Avalon or Main between Sepulveda and Carson). FRANK GUTIERREZ (6457-41297, Ext. 1777). TE 5-4874. 15-7

3:45 p.m. — 12:15 a.m.

(Zone 4)
IMPERIAL & PIONEER, Norwalk. OTTO EBNER (5411-17439, Ext. 1491). TO 3-9542. 16-4

4:45 p.m. — 1:15 a.m.

(Zone 1)
HOLLYWOOD BLVD. & NORMANDIE. (2 riders wanted). PAUL W. MELLOTT (5587-23631, Ext. 1947). NO 4-0831. 18-1

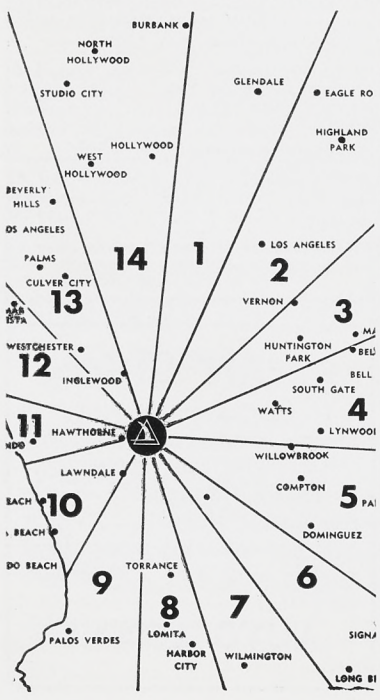
(Zone 4)
SANTA ANA FREEWAY & BIRCH, Santa Ana. LOUIS DEL GROSSO (5445-17277, Ext. 1926), KI 5-1468. 18-4

(Zone 8)
TORRANCE BLVD. & CRENSHAW BLVD., Torrance. LEO A. LABRIE (5587-82, Ext. 1947). FA. 8-1848. 18-8

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 8)
YUKON & 171ST, Torrance. (Will wait at either 171st & Crenshaw, 171st & Yukon or 171st & Prairie). JOSEPH J. SCHMIDT (5445-17470, Ext. 1926), FA 1-1803. 2-8



RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 9)
HAWTHORNE & SEPULVEDA, Torrance. FRANK PIWOWARSKI (7000-15686, Ext. 788). FR 5-0352. 2-9

BETWEEN VIA COLUSA & VIA PASQUAL, Redondo Beach. BETTY L. DONNELL (5355-39555, Ext. 1445). FR 5-6703. 2-9

TORRANCE AREA, Torrance. (Desire to share ride with person or persons living in Ellinwood). G. W. JACKSON (3410-13104, Ext. 2356). FR 5-8779. 2-9

(Zone 10)
VAIL & CURTIS, No. Redondo Beach. (Need a ride for 2 people to Gate 3, Plt I). MARIAN B. WALTER (5353-16127, Ext. 1536). FR 4-2190. 2-10

(Zone 12)
AIRPORT BLVD. & ARBOR VITAE, Los Angeles (45). HOMER WEBSTER (5585-42866. Ext. 1378), OR 2-4153. 2-12

(Zone 14)
CHERRY AVE. OR YUKON & IMPERIAL HWY, Inglewood. MARTIN C. EMERSON (5504-37440, Ext. 1808 or 1424). 2-14

WEST BLVD. AND SLAUSON, Los Angeles. (Will consider car pool). IONE B. BUCHER (4230-39764, Ext. 631). AX 4-1122. 2-14

7:30 a.m. — 4:15 p.m.

(Zone 1)
SLAUSON & CRENSHAW, Los Angeles. JACK H. McALENEY (3000-43661, Ext. 2491). 3-1

WESTERN & 62ND, Los Angeles (47), (Car pool considered). HOWARD FLETCHER (5538-21607, Ext. 525). PL 1-3736. 3-1

(Zone 3)
SO. WESTERN & 108TH ST., Los Angeles. (Ride is needed immediately). EVELYN ANDERSON (8322-42948, Ext. 1603). PL 6-3895). 3-3

(Zone 10)
ISIS & 140TH, Hawthorne. (Want ride or will trade driving days from Hollyglen). W. A. HARBERT (8100-32245, Ext. 2717). OS 5-8723. 3-10

INGLEWOOD AVE. AT 164TH, Redondo Beach. CLAUDETTE A. FORBES (1421-39203, Ext. 1811). 3-10

(Zone 12)
LENNOX & FREEMAN, Inglewood. PAT UZDAVINIS (5100-37975. Ext. 2358). OR 7-5547. 3-12

(Zone 13)
SANTA MONICA BLVD. & SEPULVEDA BLVD., West Los Angeles. (Car pool considered). RICHARD W. KING (3410-33809, Ext. 400). GR 7-1937. 3-13

(Zone 14)
BEETHOVEN & VENICE BLVD, Los Angeles (66). JOAN SUMMERS (1421-12201, Ext. 1493 or 2393). EX 7-1047. 3-14

SELBY & WILSHIRE BLVD., Los Angeles. BERT F. DE WITT (5126-43576, Ext. 704), GR 8-4630. 3-14

8:00 a.m. — 4:45 p.m.

(Zone 3)
SO. WESTERN & 108TH ST., Los Angeles. (Ride is needed immediately). EVELYN ANDERSON (8322-42948, Ext. 1603). PL 6-3895. 5-3

3:45 p.m. — 12:15 a.m.

(Zone 4)
MAIN ST. & 116TH ST., Los Angeles. JEAN HOLBERT (5241-15772, Ext. 1271 or 2178), PL 5-8863. 6-4

(Zone 12)
EMERSON AVE. & 89TH ST., Los Angeles (3 blocks south of Manchester, west of Sepulveda Blvd.). VICTORIA PFARR (5351-40, Ext. 2582 or 541). OR 7-2646.

4:45 p.m. — 1:15 a.m.

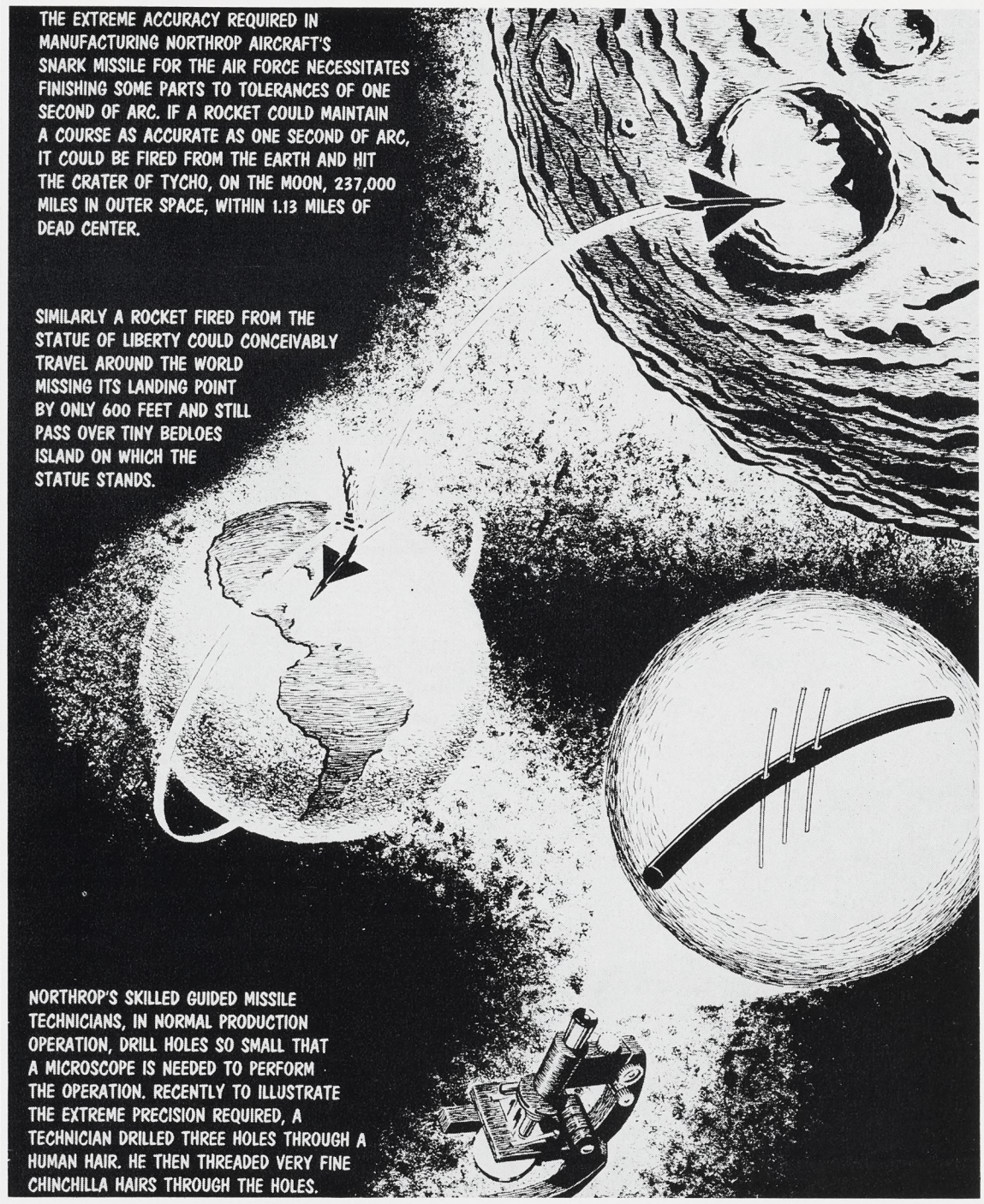
(Zone 1)
CRENSHAW & 67TH ST., Los Angeles. (Ride to work only). O. L. MAXON (9350-27914, Ext. 1810), CA 8628. 8-1

(Zone 2)
JEFFERSON AND FLOWER, Los Angeles. F. J. KOCH (5354-16458, Ext. 467). 8-2

(Zone 4)
SANTA ANA FREEWAY & BIRCH, Santa Ana. LOUIS DEL GROSSO (5445-17277, Ext. 1926). KI 5-1468. 8-4

(Zone 5)
CARSON & BELLFLOWER BLVD., Lakewood. (Car pool considered). G. W. SWANEY (7330-27025, Ext. 749). GA 5-4145. 8-5

(Zone 8)
TORRANCE BLVD. & CRENSHAW, Torrance. ELDORA SPRATT (5339-43664, Ext. 1565). 8-8



Ontario Idea Worth $230 To Wranosky

An Ontario Norcrafter was $230 the richer last week when he received a Suggestion Award check for that amount.

Donald D. Wranosky, Empennage Assembly and Installation, won the award with a simple—yet ingenious—suggestion he submitted for a lower vertical stabilizer cradle jig.

In the assembly and inspection of the stabilizer—part of which was performed with the part lying horizontally across padded sawhorses—Wranosky noted that it was necessary for several men to turn the part for work on both sides.

His suggestion resulted in the manufacture of plywood cradles to hold the stabilizer in a vertical position. This, of course, allowed work on both sides without the necessity of turning the part frequently, and minimized possibility of damaging the assembly.

Investigation of the suggestion in practice by Suggestion Award reps and supervision showed a time savings alone of five hours per ship.

RIDES WANTED

Miscellaneous—Split Shift

(Zone 2)
VERMONT & 51ST, Los Angeles (Hours: 4:15 p.m. to 12:45 a.m.). GLORIANNE JONES (9330-41955, Ext. 2228). PL 9-7498. 10-2

(Zone 13)
FREEMAN BLVD., & ARBOR VITAE ST., Inglewood. (Hours: 4:15 p.m. to 12:45 a.m.). MARY LOU DORN (4100-33339, Ext. 2331). OR 4-2196. 10-13

Suggestion Check Puts New Methods to Work

Modern analysis methods applied to ideas—.

Northrop Aircraft, long recognized as one of the companies most receptive to new and better ways to do the job, has now placed ideas on an exact "shakedown" and evaluation basis, it has been announced by Ken Bowen, vice-president, Manufacturing.

Using company idea information interchange, through the offices of the Aircraft Industries Association, as a base, each suggestion recorded will go to Manufacturing Methods Engineering, where a complete study will be made pursuant to incorporation in Northrop systems of operation.

"Ideas are one of the most valuable assets a company can possibly have," commented Bowen, a former chairman of the AIA Manufacturing Methods Committee. "It is our intention to make sure that all suggestions on time, material, and cost reduction are thoroughly explored for application in manufacturing. Furthermore, if the idea is good, but finds no ready place in present operations, it will be catalogued and held for the time when we can use it."

Ideas from Northrop's Suggestion Award plan are also fed to the study and evaluation group where they become a part of a giant pool of new know-how and technological information.

The Conservation panel under the AIA's Manufacturing Methods Committee has been designated as "clearing house" agency to put industry conservation ideas into circulation. It has proved a most fruitful source.

Ray Wenger, Material Conservation coordinator, is Northrop rep on this panel. Meetings are held three times a year at which time member companies—all the aircraft industry and many suppliers—contribute new cost-saving methods that other members are welcome to use.

At a recent meeting in Dallas, representatives from 35 aircraft plants turned in 126 separate suggestions. Manufacturing fields covered ranged entire operations. Some of the Conservation ideas covered: photo templates, pressure sensitized tapes, saw blades, machine belts, sealants, rubberized hair, hardware, containers, purchased parts, automotive equipment, stationery supplies, sheet stock culls, small tools, dies, liquids, gases and oils, electrical and electronic supplies.

Material from the AIA Mat Con panel, plus those from Northrop's Suggestion Award plan, provide a potential 3000 ideas per year, each with the inherent possibility of aiding the nation to obtain more "Air Force per dollar".

The AIA conservation panel held first company idea interchange meetings in 1953. Since that time, the panel has shown steady increase in productivity, with aircraft industry becoming more and more aware of this source of cost reduction.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — noon Wednesday one week before publication.

FOR SALE

ACCORDION 140-bass, Castle, case and straps, cost $1800, $750. RICHARD MARKS, OS 6-4621. A

SCREEN DOOR, 2'-7"x6'-7", $5. W. W. KELLY. PL 4-9637. A

TRANSMITTER, Johnson Viking I, with Viking VFO, bug and mike included, $150. R. B. McINTOSH, OR 2-4920. A

PISTOL, Colt, officer's model, .38 Special, Magnum grips, target sights, $65. RONALD DITTMER, LU 1-5290. A

OUTBOARD MOTOR, 5 H.P. Scott Atwater. $170. J. L. GREEN, DA 3-1732.

POLICE SPECIAL, .38 cal. S&W, 5" barrel, clam-shell holster, cartridge belt, $60. R. G. THIESING, OS 6-4119, after 4:30 p.m. A

GOLF CLUBS, matched set (4), Spalding, woods. $30. PL 6-2242. A

IRONER, Conlon, 30", knee-hand control, cost $195, $75. WM. S. HOROWITZ, WE 5-0493. A

CAMERA, 4x5 Crown Graphic, 127MM Kodak Ektar lens, shutter 1 to 1/400 sec., Kalart range finder. Heiland 3 cell flash gun, cost $320, $195. J. N. RAY, CI 2-7222. A

TIRES, two 8:00x15 Ford, tubes, wheels 6" rim. A. A. BEYER, OR 7-3922. A

HOUSE, 2-bedroom, 4 blks. from Northrop, $1200 dn., fenced yard, fruit trees, shrubs, attached garage, $11,500 full price. OS 5-6440, after 12 noon. A

CLOTHES POLES, 2 pair. M. A. WEIR, DA 4-3878. A

ANTIQUES, marble top chest, dining room table, sofa, table lamp, gold frame mirror. G. M. RUSSEL, FR 5-1224. A

CHROME SET, four chairs, grey, $40. MARIE CATALDO, OS 5-5942. A

DAVENPORT, rose silk brocade; 2 END TABLES; COFFEE TABLE, blonde; OCCASIONAL CHAIR, MIRROR. J. MURPHY, PL 9-7635. A

CAMERA, Welmy type 6x6, Terionar lens, flash gun, rangefinder, leather cases, roll b & w film, roll color, all $35. RAY B. BUTCHER, FR 4-1172, after 5 p.m.

GOLF CLUBS, 5 irons, 3 woods, nylon bag, Johnnie Bulla, registered, used 3 times. $50. D. O. BAUGH. OR 4-6561.

RIFLES, 300 Savage, never used, 30.06 Remington, 1917 model, Lyman rear peep sight, $100 for both; full size BABY CRIB, blonde, $10. RICHARD J. NAPIERALA. Write to Northrop News, Box 1307. A

FREEZER, Amana, 12 cu. ft. upright, used 2 yrs. $165. G. E. KANYUCK, HE 9-5566.

LIVING ROOM SUITE, green frieze; DINETTE SET, blonde, six chairs. DA 4-4410. A

HEARING AID, Maico transistor type, late model, within original guarantee period, cost $200, $125. J. D. WILLSON, GR 2-6621. A

COUCH, 3 piece sectional, green, $50; red leather CONTOUR CHAIR, $45. MARION NAP. PL 4-4257. A

TV 16" table model "51" Philco, $49.50; matching SWIVEL TABLE or solid base, $6. PHIL BURGAN, DA 4-5400. A

PARAKEETS, young, $1 each. NORMA J. PITTS. OS 5-1706. A

VACUUM CLEANER, Compact and attachments, good condition. $25. FR 9-3871.

TOOL BOX. Kennedy Machinists, $16; 1/4 h.p. SPRAY PAINTING OUTFIT, complete, $20. HAROLD WARNER, OS 6-8651. A

WASHING MACHINE, Maytag, square cast aluminum wringer, pump, $100. CHAS. DE ROME. PL 2-4347. A

BED DIVAN, full size Hideaway, one-year-old, $65 or offer. LOUIS ROBUL. Write to Northrop News, Box 1306. A

SEWING MACHINE, treadle type Singer, with attachments, $150; Conlon mangle IRONER, $35. PETER E. CYRONEK, FR 9-7914. A

DRAFTING MACHINE, BRUNING, used 3 months, 12" & 18" clear plastic scales, $70. WILLIAM H. BAXLEY. Write to Northrop News, Box 1305.

BEDROOM SUITE, modern, and 2 lamps, $85; chrome KITCHEN SET w/4 chairs, $40; Babyline BED, Kantwet mattress; PLAYPEN, TAYLOR TOT; HIGH CHAIR. A. LIEBICH, OR 2-1840. A

SHOTGUN, 16 ga. bolt action, 3-shot, case, cleaning rod shells, adjustable choke, $40. ED WEBER, OR 2-5470. A

HOUSE, Torrance Plaza, 3 bedrooms, double garage, fireplace, fenced, $14,500. NEIL S. DAY, FA 8-3061. A

TRUNKS, two metal covered 30" long, 16" wide, 12" deep, $9 each or offer. A. J. STEWART, JR. Write to Northrop News, Box 1304. A

TRAILER HOUSE, 22' late model, $550 cash or $200 for equity, take over bal. at $45 per mo. D. H. EAGLIN, NE 1-7209. A

FREEZER, 1954 Crosley Shelvador, 20' chest, $800 new, make offer. FRED BURKETT. TH 2-3294, after 5 p.m. A

RECORD CHANGERS, Garrand, RC 80, $50; Miracord XA100, $65; Webcor (78 RPM), $5. W. LOHWASSER, AX 3-0439.

FOR SALE

TIRE CHAINS. One pair, fit 6.00x16 tires, $5. RICHARD HEISE, OS 6-3138. A

PORTABLE IRONER, Armstrong, $18; 3 pc. BEDROOM SET, walnut. MYRNA SARGENT, PL 3-6744. A

RIDE TRACTOR, 3-wheel, 7½ h.p., plow, harrow, disc, scraper, $275; Presto Lite WELDING TANK and attachments, $22.50; TRICYCLE, $4.50; Choremaster POST HOLE DIGGER, gasoline motor, $100. HAROLD L. BENNETT. Write to Northrop News, Box 1303. A

KITCHEN RANGE. 4-burner, nearly new; PHOTOGRAPHIC ENLARGER; DARKROOM EQUIPMENT. LEO SOFFA, FR 4-5987. A

DACHSHUND PUP, 15 months old, male, excellent stock. $50. S. H. DUNWOODY, GA 1-7414. A

PIANO, upright, mahogany, nice tone, $50. DA 4-2406, evenings or weekends. A

TRAILER, 4' x 8', reasonable. ROSEMARY M. WINTERS. DA 4-7656. A

UTILITY BOAT, 12' plywood, and trailer, $225. A. M. OCSENAS, TO 2-9566. A

TABLE SAW, 8" tilt-arbor, Craftsman ¾ h.p., 3400 r.p.m. motor, table included, $65. WALT VALERSKY. DA 3-1726. A

TV, 21" Kaye Halbert console, remote control, 1954 model. $90. HARRY J. VAN BREE, NE 5-4595. A

SHOTGUN, J. C. Higgins pump, 12 ga., ventilated rib, Polychoke, 2 extra choke tubes. DAVID L. YOUNG, OR 4-4136, OR 7-3602. A

SECTIONAL SOFA, $15. W. W. KELLY, PL 4-9637. A

SILVERWARE SET, 62 piece quadruple plated, modern pattern, reasonable. FR 5-9885 after 5. A

BATHINETTE, $10; BASSINET, $2; French RACING BIKE, $35; AUTO RADIO (reconditioned) fits most cars and sports cars, $10. W. J. ST. JAMES, OR 2-5804.

SUN-VISOR, fits '50 to '53 Buick or Cad, $20. A. L. CALDWELL, PL 5-0138 before 3 p.m. A

RIFLE, custom built .270 Ackley Magnum, Weaver K-4 scope, case. W. HENRICH, FR 4-5412. A

TV, Traveler 21" mahogany table model, antenna, $100. OS 6-1684 after 4:00 p.m. A

AQUALUNG, 60 minute air supply, single strand Arbolite SPEARGUN, WEIGHT BELT, $60 complete. W. W. FERGUSON. DA 4-3947 after 5 p.m. A

TRAILER HOUSE, 25', apt. size stove, 7' refrigerator, $600, includes awning and poles. FR 4-9280, 10:00 a.m. to 2:00 p.m. A

BOAT, 19' cabin cruiser, head, galley, 25 h.p. Johnson, electric bait pump, tank, trailer, '56 license, $1495; TRAILER, 13' alum. Cozy Cruiser, sleeps 5, $395. G. L. DEVENDORF, OS 6-7588. A

TV. 16" mahogany console. $25. B. P. BRADY, DA 9-5646. A

SPACE HEATER, Gas, $55 new, $35, 30,000 B.T.U.; Thor Semi-Auto WASHER, $15. K. L. VELDHEER. DA 3-2834. A

REFRIGERATOR, 6 cu ft. Servel gas, $50; ladies' SKIS, bindings, poles, $35. C. W. MAXFIELD. AX 4-4613. A

SEWING MACHINE. Singer, portable cabinet, attachments, incl. button hole maker, $100. HAROLD PARRY, OR 1-9835. A

BICYCLE, girl's Monarch, $25. IDA FINK. OS 5-5618 evenings. A

ROLLER SKATES, lady's, Chicago, size 5½, case included, $15. ENGELBERT H. RUSA, OS 5-2852. A

GUITAR. Martin tenor, $65; CASE, $10. ALICE BASSETT, PL 4-3554, evenings. A

PIGEONS, some tumblers, some racers, 50c to $1.50. FLOYD JAMES, FR 9-3750.

ENLARGER. Federal 269, complete with masks for 35mm to 2¼ square, $20. R. ADAMS, FR 5-5574. A

AMPLIFIER, Masco 35 watt output, $20; '49 Triumph Trophy MOTORCYCLE, $150. RICHARD LONG, OS 6-6637. A

FREEZER, Sub-Zero upright 18', make offer. NAOMA M. CLARK, OS 6-4622. A

VACUUM CLEANER, Hoover upright, reconditioned, $15; RADIO, Craftsman FM-AM tuner, cost $160. $100. ROY STAHL, DA 6-7877. A

SINK TOP, ceramic tile, 54"x24", single basin, $20. ARTHUR E. ENGLAND, DA 9-5316. A

CARRYING BASKET for bicycle, like new, $2. ROY A. BALLING. VE 9-7378. A

SLOOP, 24' Loa, sleeps 2, S.S. rigging, working sails, outboard auxiliary, $2500. RICHARD E. OUELLET ME 3-3500. A

FURNITURE, 5 rooms plus stove, refrigerator, automatic washer, vacuum cleaner. $500 full price, will finance. Write Northrop News, Box 1310. A

PIANO & STOOL, cut down, brown leather covered, $75. WM. P. LAVOIE, EX 7-8638. A

CAMERA, Cannon IV-S2, f1.8 50 mm lens, case, lens shade, $135; ¼ electric POWER MOWER, 90' cord, $35. H. C. WALKER. DA 4-7861. A

FOR SALE

ELECTRIC SHAVER, Remington 60 Deluxe, used 2 weeks, $19.95. OS 6-6074. A

GAS RANGE. Deluxe, Kenmore, 2 years old, cost $280, $175. PAUL W. GREEN, DA 9-1053. A

CRIBS, three, $10, $4, $2; HIGH CHAIR, $3; wringer type WASHING MACHINE, $15; DRAFTING MACHINE, $70; DRAFTING CHAIR, $30. FR 2-3096. A

HORSE, small, 10 mo. old filly. $65 or best offer. PL 5-6610. A

GUITAR, electric, amplifier & carrying case. $50. JOSEPH A. STIEBER, DA 4-4086. A

RADIO-RECORD CHANGER, Stewart-Warner, 78 RPM, automatic, walnut console, $25. B. E. RUNSWICK, OR 7-3514. A

MATTRESS, Sealy box spring, full size, $45, cost $70. F. VOGT, write to Northrop News. Box 1312. A

GOLF CLUBS, matched set, Lloyd Mangrum, Wilson Irons No. 2 thru 9, 2½ years old, $30. G. ROSS, EX 6-4046. A

TRAILER, 2-wheel box frame, 4x9', 2 extra tires and rims; REFRIGERATOR, Servel, 6'; WASHER, Bendix spin dry, new motor. WILLIAM N. VOLESKY, OR 2-5756. A

CAMERA, Viewmaster Stereo, case, flash, film cutter, 36" close-up lenses, viewer, filters, all instruction booklets, $100; Hoffman 14" table model TV-RECORD PLAYER. $35. DENVER HOWARD, OS 5-5829. A

CAMERA, Cannon IV-S-2, Cannon F-1.8x 50 m.m. lens w/self timer, $175. JOHN STRATTON. OS 5-3662. A

BABY BED, light finish, $10; TAYLOR-TOT, $5. GLADYS CUMMINGS, OR 1-8103. A

STEAM BOILER (Steamaster), automatic 3½ h.p., $150; 2 stainless steel KETTLES, 60 and 80 gallons, $35 each. RAY LA PALME, DA 9-4065. A

POWER MOWER, $70; BEDROOM SET, single bed, $50; KITCHEN TABLE, Formica and chrome, $10; platform ROCKER, $10. KAROLL SHURTZ, OS 6-0393 A

JOINTER-PLANER, 4⅜" Craftsman; ½ h.p. 3450 rpm Craftsman MOTOR, STAND, all for $50. WILLIAM J. SIMKO, TO 4-0175. A

GLASS BOAT, 12' Wizard; 1954 Evinrude 7½ h.p. OUTBOARD, used 6 hours; two wheel TRAILER, butane stove, oven, sleeps four. Terms if desired. F. M. ROSENSTIEL, NE 2-7610. A

COFFEE TABLE, oak, blonde, glass top, $20. R. N. OLIVER, FR 5-7387. A

FURNITURE, club chair and ottoman, $30; modern table lamp, $5; tub style occasional chair, $15; modern floor lamp, $10; corner 5 tier shelf, antique, $10; white Boston rocker, $8; metal folding cot and pad, $6. J. P. KANE, OR 1-1114. A

OSCILLOSCOPE BOOK, by John Rider, cost $12, $8. VICTOR LINCOLN, AD 3-3084. A

CAMPING TRAILER, folding, sleeps 4. TED KELLY, DU 8-4082. A

PIANO, mirror top, $175. ROBERT B. CULBERTSON, OS 6-7535. A

PATIO FURNITURE, redwood, used 2 years, cost $200, best offer; SKIN DIVING SUIT, weights, best offer. BOB HOLT, EX 8-2223. A

BUGGY-CARBED combination, pad, windbreaker, $15; 14' SPEEDBOAT HULL, $250. BRASIE T. CASTRO. PL 3-9935. A

WASHER, Easy Spindrier, 1949, $50. HARRIET CHANEY, FR 2-6082. A

REFRIGERATOR, Servel; O'Keefe & Merritt table top STOVE, both for $100 or sell separately; ANTIQUE DIVAN, hand carved, walnut, $50. RUTH FOSTER, OR 2-3201. A

RADIO, Oldsmobile push button, $10; BATTERY from '41 Chevrolet, $4. OS 5-4054. A

BREVI-TYPE MACHINE (similar to Stenotype), carrying case, instructions, lesson plans, $15. H. J. BLACY, JR., FR 2-9794. A

POWER MOWER, Toro, 21", chain drive, $45; HAND MOWER, $7.50; EDGER, $2.50. L. E. WILSON. Write to Northrop News. Box 1321. A

COOKING UTENSILS, complete set, Wear-Ever, $40. RAYMOND A. BLOMMER, FR 9-6741. A

TACHOMETER, 8000 r.p.m., head and drive unit, fits Ford or Merc. any model under '54, $15; GLADIRON, automatic ironer, $30; 4-piece DINETTE SET, good condition, $20. WILLIAM CICERONE, PL 2-9486. A

MULTIBREAKER BOX, 8 circuits, $10. W. W. KELLY, PL 4-9637. A

WASHER & DRYER, Westinghouse, reasonable; 22' HOUSE TRAILER, all aluminium, reasonable. ANDREW C. DELL. Write to Northrop News, Box 1315. A

BABY CRIB, complete outfit, $20. VIC BERTAGNA, PL 4-6974. A

WASHING MACHINE, automatic, '55 model Frigidaire, $175. DA 9-4240. A

PIANO, Baby Grand, case needs refinishing, $225. WALTER HANF, OS 6-4626. A

TRAILER, Teardrop, sleeps four, $125. H. J. DE BRY. PL 6-4978, evenings. A

M.I.T. RADIATION lab. series, Vol. Nos. 1, 5, 21; electric portable STEAK BROILER; CLARINET, $15; Sunbeam SHAVEMASTER, $8. OR 8-6548. A

STOVE, O'Keefe-Merritt, chrome top, glass oven doors, $95; FIREPLACE SET, complete, $15. Write to Northrop News, Box 1318. A

FOR SALE

REFRIGERATOR, Servel; Bendix AUTOMATIC WASHER; table-top STOVE, all three for $110 or sell separately. OS 6-7461 after 6 p.m. A

PARAKEETS, CHIHUAHUA PUPPY, long-coat male, champion sired. SGT. G. KIBODEAUX. OS 6-3651. A

CHEMICAL TOILET, chemical and charcoal included; CONTOUR CHAIR, Birk-Loc. never used. P. W. SANDERS, OS 5-7993. A

TABLE LAMP, brass, $8; PLANTER LAMPS, $5 each; 2 piece SECTIONAL, matching CHAIR, $45; THROW RUGS. PL. 6-7337.

CLOTHES POLES and line; LAUNDRY TUB; BASSINETTE and pad; small portable CABINET; SCREEN DOOR 3'x6'9"; OCCASIONAL TABLE; clothes DRYING RACK. DA 6-5102. A

WIRE RECORDER, portable, and 78 rpm record player combination, extra wire spools, $39. HALL EVANS, AX 4-7304. A

WANTED TO BUY

CAMERA, Stereo-Realist, current model F2.8 lens. C. C FLOWERS, OS 6-3726. B

CAR, small, for transportation; portable BABY CRIB. B. P. BRADY, DA 9-5646. B

RUG, 9' x 12', good condition, reasonable; PLATFORM ROCKER or OVERSTUFFED CHAIR. I. E. ELLIOTT. Write to Northrop News, Box 1301. B

GUNS, old .22, large bore rifle and shotgun, cheap. Suitable for rebuilding Military rifle considered if bore is clean. Write make, model, cond. and asking price. Write to Northrop News, Box 1302. B

SKIING EQUIPMENT in reasonably good condition, prefer slightly used. DON GULSERIAN, OS 5-6449. B

WASHER, Bendix automatic bolt down, round or square tub, need not be in working condition. FR 2-4673. B

OUTBOARD MOTOR. 7½ horse Johnson or Evinrude. PL 6-4952. B

MODEL AIRPLANE ENGINES of the AA, A, & B class. R. E. SMITH, FR 5-7432. B

SPEED BOAT, 16' or under 2 to 3 place inboard, prefer V-8 or Mercury engine, condition of engine not important, under $250. JAMES HAIZLIP, OS 6-3319. B

DRAWING BOARD LAMP, Dazor, used. WARREN McARTHUR, JR., FR 2-7789. B

HOME WORKSHOP, used De Walt or Comet, recent model, good condition. J. L. THURMOND, AX 1-0483, message. B

WASHING MACHINE, good electric, state model, condition and price. LEO W. DAY. Write to Northrop News, Box 1316. B

FLOWER POTS, used, 12" or larger. reasonable. P. W. SANDERS, OS 5-7993. B

SEWING MACHINE, portable, preferably Singer, will consider other make, reasable. R. A. BALLING, VE 9-7378. B

WHEELBARROW, good, used. ADAM SLUSARZ, FR 9-7342. B

FOR TRADE

CONVERTIBLE TOP, "56" Thunderbird, trade for '55 or '56 T-Bird hard top, in very good condition. WALLY HENRICH. FR 4-5412. C

POWER MOWER, Sears gasoline, 20", cost $118, trade for late model vacuum cleaner with min. of ⅞ h.p. motor. GEORGE T. COSTA, DA 6-3282. C

SHOTGUN, 16 gauge double barrel German made, trade for power woodworking tools. G. ANDERSON, FR 5-7604. C

DEEP FREEZER. Columbia Custom 18½ cu. ft., trade for good transportation car (1950) or later or make offer. D. A. NEINAST, ED 2-9984. C

FREE (To be given away)

PUPPIES, two, 6 weeks old, male, Boxer-Collie mixture. WILLIAM H. BOLT, Whitehall 2-4300 (Lancaster). D

DOG HOUSE, pitched shingle roof, approx. 4'x4'x6'. JOHN V. PUGH, OR 4-4445. D

SCRAP LUMBER, fire wood and some picket fence of different sizes & lengths. Free for hauling away. JAMES T. McGILL, OS 5-2639. D

HEDGE, 40' long, grow to 6' high, dig it yourself, bring replacement fill dirt. ENGELBERT H. RUSA, OS 5-2852. D

RENTALS OFFERED

ROOM, nice home near Northrop, male, $7.50 per week. BETTY McNABB, PL 4-3698. E

SHARE HOME with lady working day shift, home privileges. HAZEL LAUMAN, FR 4-5852 after 6 p.m. E

APARTMENT, large one-bedroom, unfurnished, garage, near Northrop. B. S. DAVIS, OS 5-8187. E

APARTMENT, 2-bedroom, prefer 2 men, or family with child OK. J. L. BROWN, DA 4-6143. E

APARTMENTS, new 1 and 2 bedroom, unfurnished, garage, near Century and Crenshaw, $77.50 and $95. EX 6-6823 or 9-5587. E

HOUSE, 5-room, 4 miles from Lancaster, new. G. G. COLLINS, PL 5-4910. E

HOME, new, 3 bedrooms and den, 1¾ baths, fenced yard, 2-car garage. For rent or lease, reasonable. ROGER RANDALL, Whitehall 2-3766, Lancaster. E

RENTALS OFFERED

HOUSE, 3-room stucco, on lot alone, unfurnished, adults, $65 mo. FR 4-2590.

APARTMENT, furnished kitchenette, one block from ocean front, utilities paid, $50 mo., garage available. GEO. W. LESHER, FR 2-2418. E

HOUSE TRAILER, 3-room, shower, fenced, infant OK, 1 block to Plant I, utilities furnished, $50 mo. for one person, $60 mo. for two or more. ETHEL TROWBRIDGE. OS 6-6577. E

FURNISHED ROOM, day shift gentleman, 20 minutes from Northrop, $10 per week or $40 per month. DA 4-4410. E

COTTAGE TRAILER, adjoining patio, bath, laundry room, man only, $1 a day. VINCENT GIAMMARIO. OR 1-4742, eves.

HOUSE, 3-bedroom, furnished, near new furniture, adults only. Hawthorne $115 per month. G. LIVINGSTONE, OR 8-4822.

APARTMENT. Hermosa Beach, near beach, school, 1 bdrm., furn., fireplace, garage, $75 per month. MRS. JACKSON, FR. 2-2971. E

APARTMENT furnished single, $47, utilities included. CLO JONES, AX 3-0578. E

APARTMENT, new, unfurn., walking distance Plant 1. $80, garage. OR 7-6059.

BACHELOR APARTMENT, knotty pine, near Northrop, $55 per mo. OR. 7-3704, after 5 p.m. or weekends. E

FURNISHED ROOM, 5 blocks from Northrop, man, $8 per week. OS 5-5850. E

APARTMENTS, 1 and 2 bedroom, unfurnished, garage, near Century and Crenshaw, $77.50 and $95. EX 6-6823 or EX 9-5587. E

SHARE HOME, girl to share 2-bedroom and den, modern home with working girl. OS 5-3505 after 5:30 p.m. E

APARTMENT, new 2-bedroom, unfurnished, duplex, fenced, garage, Prairie Ave. Alondra Golf Course, baby O.K., available March 11, $80 month, water paid. GEORGE E. HARRIS. OS 6-7860. E

HOUSE TRAILER, 22', hot water, electric refrigerator. $12.50 per week. ENGELBERT H. RUSA. OS 5-2852. E

HOUSES, 2 new, 2-bedroom unfurnished, within mile of Northrop. OS 6-8816. E

HOUSE North Redondo, 3 bedrooms and den, fireplace, fenced, garage, one blk. to stores, transportation, $95. H. W. STOTEN, FR 2-0840. E

APARTMENT, 3 room furnished, utilities paid, Gardena. J. L. BROWN, DA 4-6143. E

SHARE HOME, 3 bedroom, Morningside Park, kitchen privileges, TV, garage, telephone PL 4-8289, after 2 p.m. E

RENTALS WANTED

APARTMENT, 1 or 2 bedroom with stove and refrigerator not over $55. Adults, can furnish excellent references, no pets, vicinity Northrop. G. W. BLANDI, OR 2-0710. F

CHILD CARE OFFERED

CHILD CARE, my home, 5 days week, fenced yard, playroom, TV, naps and lunches, any shift, $10 week. RICHARD ZACHARY, OS 5-4537. G

FOR SALE OR TRADE

BOW, 55 lb. Ben Pearson, $10 or trade for 35 lb. reflex type bow in good condition. R. H. PAYNE GA 5-8154. M

CUTTING EQUIPMENT, butane, complete, no air bottle; 15.2 h.p. Sea King OUTBOARD ENGINE, 1943, trade for good 25 h.p. outboard engine or take $165 for all or sell separately. G. L. NICKEL, FR 2-0585. M

GRAFLARGER, 4 x 5, with stand, fits standard 4 x 5 Graflex, $35 or trade on 4 x 5 Omega enlarger. DICK SHEETZ. Write to Northrop News, Box 1320. M

PATIO FURNITURE, redwood, 2 chairs, love seat, $5; CHAISE LOUNGE, metal, $7. Write to Northrop News, Box 1311. M

WASHING MACHINE, wringer type, timer, pump, $25 or trade for camping equipment. PAUL M. BLASINGAME. Write to Northrop News, Box 1313. M

WASHING MACHINE, wringer type, $15; air COMPRESSOR and PAINT SPRAY OUTFIT, $100; PARTS from '42 Packard Clipper. Trade for automotive engine rebuilding equipment. FR 2-3096. M

MOVIE CAMERA, 8mm Revere model 81 and G.E. LIGHT METER. $50 or trade for Argus C3. R. E. SMITH, FR 5-7432. M

REFRIGERATOR, Hotpoint, make offer or will trade. PL 9-5719. A

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations Office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
Play-offs now in progress. Mondays 6:30 p.m., Fremont High School, Thursdays, 6:30 p.m. John Muir Jr. High School.

BIBLE STUDY,
Meet daily, Plant I, east mezzanine conference room, 11:15 a.m.; Plant II, M.W.F. 12:00 conference room M1-B1, T.Th. 12:30, conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting, 2:30 p.m.

BOWLING (days), Wayne Chamberlin
BOWLING (nights), Garland Steiner
Winter leagues now in progress.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m. Next—March 13.

CAMERA CLUB (days), Howard Linnenkohl
Meet 1st & 3rd Friday evening, 7:30 p.m. Next— March 2.

CAMERA CLUB (nights), Gene Beck
Meet 1st & 3rd Saturday, 7:30 p.m. Next—March 3.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30 p.m. Next—March 21.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next—March 28.

GOLF, Andy Titus
GOLF (nights), Pete Lower
Rio Hondo Scotch Foursome Tournament March 25. Entry blanks available at Personnel Activities.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

MIXED CHORUS, Florence Graveline
Meet every Tuesday evening, 7:30 p.m.

MODEL CRAFT, William Feldt
Meet 1st and 3rd Monday, 7:30 p.m. Next—March 5.

MODEL RAILROAD CLUB, John Felder
Meet every Sunday morning, 9:00 a.m., and every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, Wilton Johnson
Combined philatelic and numismatic meets 2nd and 4th Mondays. Next—March 12.

RADIO CLUB
Meet 3rd Tuesday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—March 3.

SKI CLUB, Howard Fletcher
Meet every Thursday evening, 7:30 p.m.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Next—March 27.

EXCLUSIVELY FOR THE LADIES

BASKETBALL, Pam Thompson
League play Alondra Park Gym, Tuesday evenings.

BOWLING (days), Lee Hopkins
Winter leagues now in progress.

INTERIOR DECORATION
Weekly classes in lampshade making every Thursday, 7:30 p.m.

KNITTING
Meet at Clubhouse each Monday evening at 7:30 p.m.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet Tuesdays, 7:00 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Hettie Horner
Meet first and third Thursdays, 7 p.m.

SPORTS *The Northrop News*

NEW NRC CLUB ANNOUNCED

FAST GROWING HOBBY—. Four members of new NRC Model Craft club are pictured with samples of their handiwork. Left: R. T. Hood, William Feldt—acting comish, Dave Grant, Paul Vanderschans. Large model on right is Vanderschans' unfinished transoceanic paddle wheel steamer. See story this page for club information. Club meets first, third Mondays.

MODEL BUILDING HITS HIGH PEAK

Newest of NRC clubs is the recently organized Model Craft club.

The club, which includes the activities of the former Model Airplane club, is for all Norcrafters interested in any type of model or miniature building.

The first meeting of the club, held this month, brought out model enthusiasts with many samples of their handicraft, including several types of airplanes, a diesel yacht, and even an incompleted model of a transoceanic paddle wheel steamer. Some of the models are scale, others free form, and some are commercial types.

Club meets will be held on the first and third Mondays of each month. The next meeting will be on March 5 at 7:30 p.m. in the NRC Clubhouse.

William Feldt, acting commissioner of the new club, invites Norcrafters to bring families and friends. Bill says, "If you build model automobiles, tanks, planes, guns, boats or even furniture, this will be your chance to meet fellow modellers, display your handiwork and further the cause of model building."

Members will meet to compare notes and exchange ideas on this fast growing hobby.

Toastmistresses To Add Dinner In Regular Meets

A recent innovation for NRC Toastmistresses will be regular dinner meetings, according to word received from Hettie Horner, TM president.

In the past, Toastmistresses have included dinner with only special meetings and regular TM gatherings have gone sans food. Now, in keeping with the after-dinner-speaker tradition, the ladies have engaged the services of a caterer who will serve top grade cuisine at the low price of $1.50 per dinner.

The first of the new dinner meetings will be held on March 1—Thursday—at 7:00 p.m. in the NRC Clubhouse.

The International theme will receive top billing at the March 1 meeting with appropriate table decorations and programs.

Norcrafter Virginia Clark will show color slides of two European trips, Rona Jefferson will speak on a motor trip to Mexico and Dorothy Lewis will report on her recent Hawaiian trip.

The Northrop Toastmistress club, in addition to being an attractive social function, is primarily an educational medium, according to Hettie, in which Norcrafter ladies may learn proper public speaking procedures in addressing groups of all sizes and where they may correct and improve speech mannerisms and voice.

Toastmistress membership is open and all Norcrafter ladies are invited to attend any of the meetings. It is recommended that dinner reservations be made by Monday evening prior to the Thursday meetings. Reservations may be made by contacting the Personnel Activities office.

HOOPSTER TEAMS SET FAST PACE AS FINALS LOOM

As the hoopster sport nears its finale the top teams in the Snark and Scorpion leagues are coming to the fore.

First round winner under the Snark banner was Department 5503, days. In the second go they are being pushed hard by Department 5373.

El Segundo took the crown in the Scorpion league first and seem to be holding their own as they come around the second time. However, they are keeping a sharp eye out for the hard fighting Department 5340 team.

SAFETY CONSCIOUS—. Pictured are some of the 130-plus boat enthusiasts who turned out for the first NRC Boat Club-sponsored Coast Guard safety training course. Classes scheduled include a lecture on Aids to Navigation on March 2 and Taking of Bearings on March 9. Future BC safety plans include a courtesy inspection of trailered boats by Norcrafter Elmer Chiodo, a qualified Coast Guard (Auxiliary) inspector. The schedule will be announced in the near future.

Sea-Maids Tap Sandra For Honors

By HAL HUNSBERGER
President
Northrop Recreation Club

As refreshing as a cool salt breeze was the annual NRC Mariner "Bridge" held recently.

Yours truly was invited to attend with the additional privilege of presenting the annual NRC Mariner Service Award to Sandra Jo Starks — she is the daughter of Palmdale Norcrafter E. C. Starks—for outstanding service to the Mariner troop Sea Maid. The award was the result of a poll by both girls and leaders of the troop.

At the same ceremony, five teenagers from the Sea Maid received the top Mariner rank of "Old Salt". The girls were Sandra Jo, Pat Maupin, Sandra Metzger, Joyce McDonald, Cecilia Meyers.

After the awards, more than 250 senior Scouts — boys and girls—and their guests danced to the rhythms of Skip Chiodo's Quintette. (Skip is the son of Elmer Chiodo—NRC Boat Club stalwart.)

★ ★ ★

Congratulations to the NRC Surf Fishing club—. The boys recently wrestled the Playa Del Rey club for a top fisherman trophy and won 18 to 13. The PDR club must now present our boys with a shiny new trophy.

Heaviest fish of the contest was taken by B. J. White, Manufacturing Control. It was a 3-pound, 4-ounce Opaleye.

★ ★ ★

The ladies are organizing the next Sports Car Club event. It is to be titled The March Hare and Hound Rallye and will start Sunday, March 11, at 9:00 a.m. Starting point is the Clock Drive-in, Imperial Highway and Firestone Boulevard, Norwalk. Families welcome — all types cars eligible—all Norcrafters invited.

DISCOUNT NOTES FROM PA OFFICE

Item of interest to golfers is the recent Personnel Activities announcement of a special sale of Plymouth championship golf balls. The balls, manufactured by the Plymouth Golf Ball Company of Pennsylvania, may be purchased through the PA office for $7.50 a dozen—regular price is $14.75.

All orders, together with check or cash, must be placed with the Personnel Activities office, Plants I or III, no later than Monday, March 12. Delivery scheduled in approximately 10 days.

Engineers will be happy to note that half-price subscription applications for the Aero Digest magazine are now available at Personnel Activities offices. Regular subscription rate is $5.00 a year—special rates list prices at $2.50 for 1 year, $5.00 for 2 years, $7.50 for three. Subscriptions received during March will receive the March Annual Directory and Aircraft Review issue.

THE Northrop Scene BY DAY AND NIGHT

Secretaries Host Bosses

BOSSES' NIGHT OUT—. Members of the Airborne Chapter of the National Secretaries Association hosted bosses recently at dinner at Fox Hills Country Club. Some of Northrop bosses and "Girl Fridays" are pictured, facing camera from left: Vice-president, Manufacturing, K. P. Bowen; secretary, Dorothy Moore; Lynn Greene, boss Art Ford, formerly with Northrop Engineering. Back to camera, left: Mayme Colombo; Vice-president, Engineering, Edgar Schmued; secretary, Margaret Boles; Tom Jones, director, Development Planning; secretary, Ruth Horrell. Event featured Hawaiian theme, indicated by traditional leis.

ANOTHER group of bosses and secretaries at NSA event are shown, left: J. Louis Cribbs, Isabelle Lowery, R. G. Bredesen — all Spare Parts Administration; Mollie McCartney, North American; George H. Buchner, director, Contracts and Spare Parts; Alice Huntley, boss J. H. Kindelberger, president, North American Aviation. Annual event drew attendance of some 200 secretaries and their guests.

Perfect Attendance

MATTER FOR PRIDE—. Ten years at Northrop—never absent, never late—is attendance record held by Tool and Test Fixture Engineering Norcrafter Al Foedisch. Here Al, center, receives congratulations from Section Superintendent Mel Riggs, left, and General Supervisor George Van Brunt, right, both Production Engineering. Al aims at next perfect ten.

Saturation Circulation

SPARKLING new metal distribution boxes now hold Northrop News on publication day—result of cooperative efforts of Industrial and Plant Engineering, Maintenance, Reclamation, Sign Shop, Internal Transportation. Made of salvaged light steel, freshly painted, new boxes were placed on locations by Internal Transportation Norcrafters Art Blain (on truck) and Lead-Man Leo Reyes, who is rolling box into place.

Fifty Grand Potential

OPERATION of Dial-A-Gage adapter and Ideal wire stripper is demonstrated by Operator Fay Hester, Electrical and Instruments Norcrafter. Finely ground fiber glass insulation that results from stripping goes into removable bag attached to machine. Foot pedal uses air pressure. (Story is on page 2, this issue.)

MECHANICAL MAINTENANCE Norcrafters were credited by Manufacturing Engineering Methods with large assist in fabrication of Dial-A-Gage adapter. Ralph Baker, left, who developed adapter, is shown talking to three Maintenance personnel most involved in development: Ray Myers (background), Wayne Cowell, John Cote. Potential savings: — $50,000.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, March 14, 1956

Engineering Students

(See Invitation, Page 2)

AID, NOR-AID SET RECORDS

U. S. NAVY visitor—. Rear Admiral John B. Pearson, jr., BuAer general representative for district (left). He is shown with Tom Flannigan, center, assistant to Vice-president Alison, and Major P. S. Harrington, AF-PR office at Northrop. In background: Commander D. A. Seiler, BuAer, and Welko Gasich, chief of Preliminary Design at Northrop. C. D. Tripolitis, and Cmdr. D. W. Watkins, jr., of BuAer, also accompanied Admiral Pearson.

"Airman Smith" Movie To Aid AF Recruiting

A young man and his dream of speed — jet-propelled, 600-mph-plus, Scorpion-type speed— is the theme of the soon-to-be-released movie produced by the Northrop Motion Picture department for Public Relations.

Titled "Airman Smith", the 16mm sound and color motion picture was produced with the full cooperation — manpower, technical, and material — of the Air Force as an aid to Air Force recruiting programs. It is an authentic representation of events leading up to and following the decision of a young man who decides to don the blue of the U.S. Air Force.

Most of the film was shot on United States Air Force Bases and the Northrop F-89D Scorpion was used for a series of thrilling aerial sequences.

The leading character — Airman Smith — is in reality 1st Lt. Leonard R. Smith, 3004th Pilot Training Group, Moore Field, Mission, Texas. At the time of shooting he was attached to the 4754th Radar Evaluation

(See JET MOVIE, page 2)

House Told That Snark Leads Russ

The Snark missile — :

"Real pioneering in the intercontinental missile field . . . We are proud that we have been able to work with the Air Force in developing the Snark, and we are glad that at this point in time, as far as we know, the Soviets do not have anything like it."

So stated Northrop President Whitley C. Collins before the sub-committee for special investigations of the House Armed Services committee, in Washington last week.

Northrop top officials President Collins; Roland C. Pagen, company treasurer and vice-president—Finance; and Al C. Morgan, assistant secretary and director — Customer Relations, appeared before the committee to express their views as part of a congressional program seeking to establish the general health and condition of the aircraft industry. The nation's 12 major aircraft manufacturers have taken part.

Of especial Northrop interest to the committee were company financial condition and the Snark developments.

The committee is chairmanned by Representative F. Edward Hebert, Louisiana.

CHARITY PLEDGES FOR FIRST YEAR HIT $210,000 MARK

Norcrafters have written a proud and outstanding record of unselfishness in supporting AID and NOR-AID during first months of these charity programs at Northrop.

Demonstrating sincere feeling of community and plant welfare, they have pledged over $210,000, it has been revealed by figures released to the News last week.

Contributions by payroll deductions, August through January, 1956, amounted to $114,723.52. By next August, end of the first fiscal year, pledges on the books are expected to bring the total over the two hundred thousand mark.

Out of the first year contributions, an estimated $55,000 will be earmarked for NOR-AID, the part of the AID program whereby Norcrafters help take care of their own in time of need. The remainder—some $155,000—will go direct to AID to carry on the vast charity program of medical research, alleviation of suffering, education, and rehabilitation throughout the Los Angeles metropolitan area and the nation.

(See AID and NOR-AID financial reports, page 3).

Norcrafters first launched the AID and NOR-AID programs at Northrop in August of last year. Announcement of the impending program, however, was made in May, three months earlier, by Northrop's President Whitley C. Collins, when blueprints for the plan were being formulated.

Norcrafters who have postponed their decision to participate may obtain forms from their department clerks or Personnel Activities offices in all plants at any time. Norcrafters who wish to increase their contributions may do so at any Personnel Activities office.

Contributions usually fit the established pattern of twelve minutes of pay a week.

Details of the financial reports are as follows:

Two quarterly NOR-AID financial statements, released at the same time by the NOR-AID Board of Directors, indicate that this program has already received $14,081.16, and that $7,285.49 has been paid out in the form of grants to 39 applicants.

Norcrafters who made designations to specific charities contributed $36,399.14.

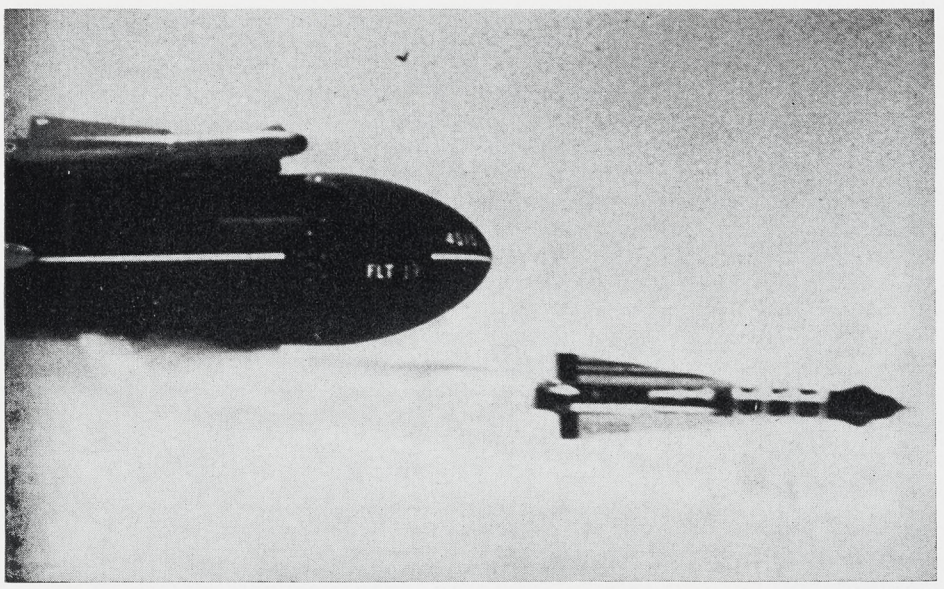
The projected report on AID includes the anticipated receipts from Norcrafters and the allocation of all moneys collected. It is estimated that the 11 charities combined under the Associated In-Group Donor plan will benefit as follows: The American Red Cross chapters will receive approximately $22,776.67; the Community Chests will benefit by $72,430.64, and more than $2,000 each will go to the American Cancer Society, the City of Hope, Crippled Children's Society and to the YMCA—Metropolitan Los Angeles.

Other charities in line for substantial donations are the Arthritis and Rheumatism Foundation, Braille Institute, Heart Association, Multiple Sclerosis Society, and the Sister Kenny Foundation.

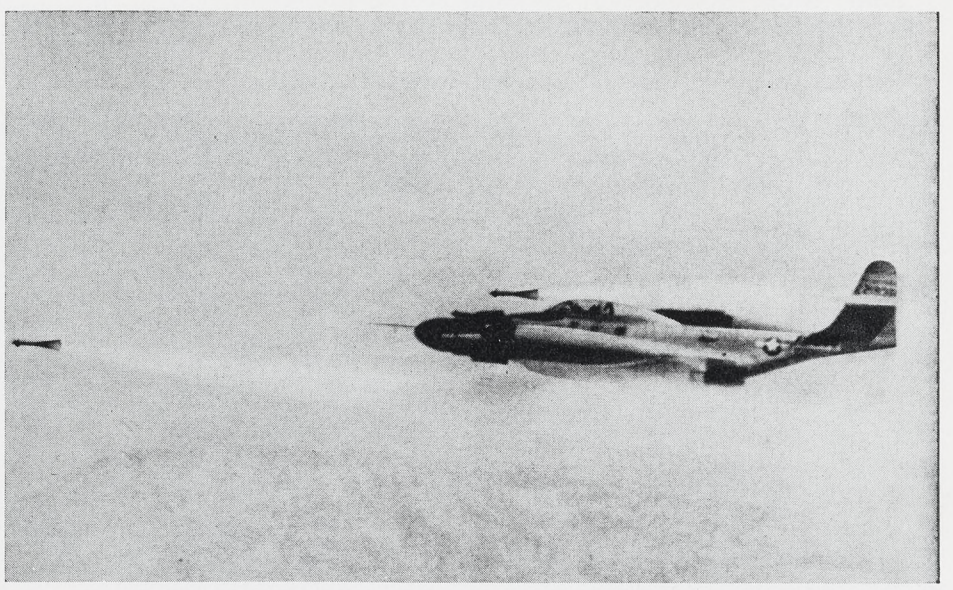
AID donations from Florida

(See NOR-AID, page 2)

Scorpion plus Falcon—!



FIRST SHOWING—. Official U.S. Air Force photos show for first time firing of Hughes Falcon guided missiles by new Scorpion F-89H. Missiles are carried in Scorpion's big wing tip pods until ready to be fired. Then they are extended from sides of pods for firing. Pod is in background in this view. Missile leaves pod, tracks down target aircraft despite latter's maneuvers to avoid the uncanny weapon.



F-89H SCORPION, shown unleashing two of deadly Falcon missiles, has become America's most heavily armed operational fighter aircraft. It is first to be equipped with Hughes-made Falcon. As H-series Scorpions come off Palmdale final assembly lines, they are being dispatched to USAF defense air stations throughout hemisphere. (Details of new H-series Scorpions are in story, page 2, this issue).

Scorpion "H" Makes Debut

WILL CARRY HUGHES FALCON AIR-TO-AIR MISSILE

The U. S. Air Force has taken the secrecy wraps off a new version of the Northrop Scorpion known as the F-89H—the first operational airplane to be equipped with the new Hughes Falcon air-to-air guided missile.

The new all-weather interceptor will go into service at bases of the Air Defense Command. It carries a combined deadly armament load consisting of both Falcon missiles and air-to-air folding fin rockets. The armament is carried in giant pods at the Scorpion's wing tips, and is fired through an electronic "brain" or control system on board the interceptor.

The Falcon missile was developed by the Hughes Aircraft Company. Effective range of the missiles is greater than that of rockets or airborne cannon. Falcons need not be aimed precisely at the target since they can sense the location of a selected target and seek it out, once released from the Scorpion.

The combination of the Scorpion with the Falcon provides new advantages in U.S. air defense. The Scorpion, heaviest armed interceptor in U.S. service, can carry its tremendous armament load to extreme altitudes. The Falcon, with a range measured in miles, can be launched from considerably below the altitude of an attacking bomber, climbing at bullet speed and using its electronic eyes and brain to strike the target, even though the bomber may be going through elusive maneuvers.

Production versions of the new F-89H are now coming off the final assembly line at Palmdale, and soon will join other versions of the Scorpion at Air Defense bases. With its new armament the F-89H continues as America's most heavily-armed all-weather interceptor. The all rocket-armed F-89D is equipped with 104 air-to-air rockets, and until advent of the F-89H was America's most heavily armed fighter.

Engineering Holds Open House for Air Students

Open house for Engineering students will be held at Northrop on Wednesday and Thursday, March 28-29.

Although aimed primarily at upperclassmen in Engineering in Los Angeles area colleges and universities, the welcome mat is also spread for Engineering students from other schools who may be home for the Easter holidays.

Exhibits of Northrop products — possibly including the Snark and F-89 — a plant tour, and talks by top Engineering division personnel feature the activities. Brochures and other displays are designed to acquaint the visiting students with the company and the engineering opportunities open here.

Return-type postcards have been distributed in local area schools for mailing by interested students. Engineering students who are from schools outside the area may make inquiry regarding the tours by calling Engineering Industrial Relations, extension 1893.

"BUCK-FET" NOW ON CRENSHAW CAFETERIA LINE

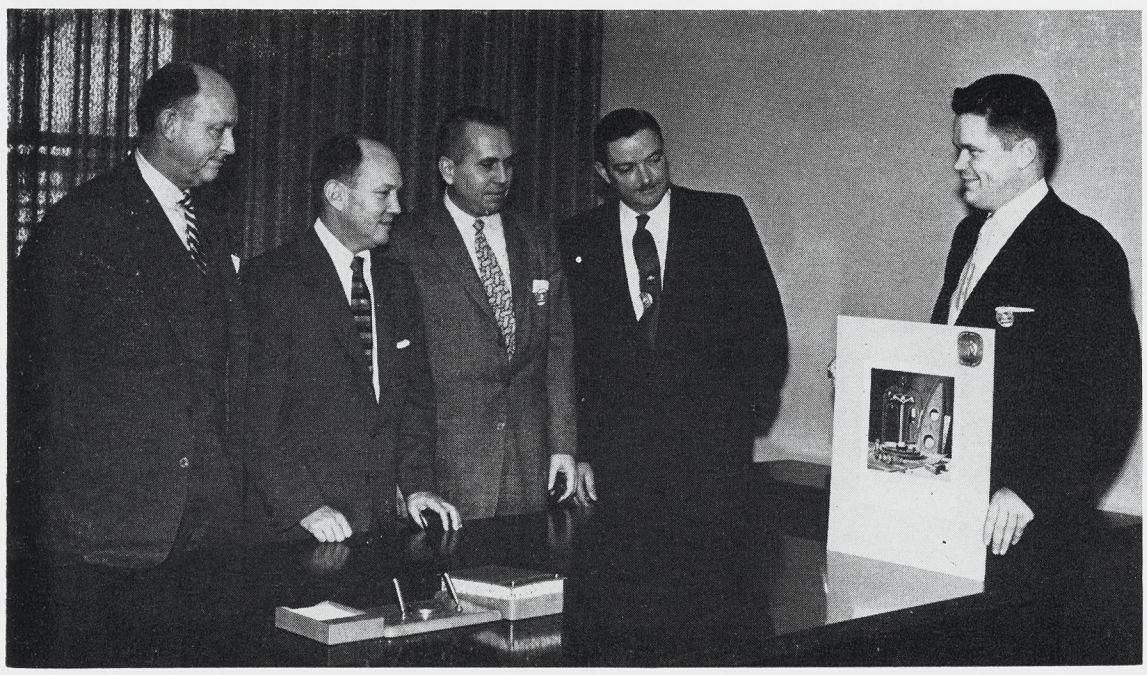
Beginning next Monday, Plant Three Norcrafters will have another tasty choice in their cafeteria, when a "buck-fet" line is opened there.

Buck-fet (pronounced "buck-fay") is a buffet lunch for a dollar, Cafeteria Manager Freddie Wolfe explained. The Plant Three version will be similar to the one which was established at Plant One in October.

The existing buck-fet line has proved to be a popular one with Plant One Norcrafters. They have commented favorably upon the buffet type service and the choice selection of foods available for the dollar price.

Tops in Coast Art

TOP ART AWARD—. Northrop ad being viewed by Advertising Plans Committee was selected from 3000 entries as best illustration in 11th annual exhibition of West Coast advertising art. From left: Vice-presidents R. R. Miller, Administration, and John R. Alison, Customer Relations; Al Cline, director of Public Relations; Grant Macdonnell, assistant to the president; and Walton Brown, advertising manager. Art Directors' Club of L.A. sponsored show. Theme: true balance between creative research, economical manufacture.



Jet Movie

(Continued from page 1)

Flight, Hamilton Air Force base.

Production credits go to Motion Picture department Norcrafters: C. H. "Spec" Watson, unit manager; E. R. Woodworth, film director; Felix T. Barlow, director of photography; J. L. Wilkinson, aerial photographer; A. K. Saiegt, stills (Photo Lab); crew members Lyn Sterling, G. A. Dallwig, G. R. Rulien, R. V. George; and Antonio Agrella, jr., Highway Transportation department.

Special acknowledgement for Air Force cooperation received, according to Watson, is due Col. Wilton Earle, CO 78th Fighter Group and Lt. Col. C. L. Aubrey, CO 84th Fighter Interceptor Squadron, for assistance during filming at Hamilton Air Force base location; and to Col. W. E. Carpenter on the Parks Air Force base location.

The 28-minute movie will be available to schools and service clubs on a free-loan basis from Northrop, according to Bill Cox, Public Relations. Extensive television showings are also planned.

NOR-AID...

(Continued from page 1)

MTF Norcrafters will be distributed to charities within their communities.

All California AID contributions are distributed through the various charities that service the communities. Principal communities are Los Angeles metropolitan area, Palmdale and Lancaster of the Antelope Valley, Ontario, and Anaheim.

Palmdale

Tigers Fly Again

READY TO PROWL—. The Flying Tigers of World War II fame have been reactivated, with honored designation going to 76th Fighter Interceptor Squadron, Presque Isle, Maine. Tigers are being equipped with Northrop F-89s. Scorpions in turn, are being readied with appropriate stripes and fangs — witness helmet. Squadron pilots above, at Palmdale to take delivery of their aircraft, are, from left—Lieutenants James Brown, B. F. Mattingly and R. D. Caauwe. Lieutenant Colonel Walter Hardee, jr. commands Tigers.

Training in Electronics Shows Results on Line

The extensive radar electronics training program under way at Northrop-Palmdale since early 1955 is beginning to pay off handsomely both in terms of schedule and cost reduction on the line, according to reports from the desert facility.

Reaction with all Norcrafters concerned is about the same.

Take David Abercromby, for instance. Dave is a radar mechanic who has gone through all three phases of progressively advanced instruction to date, and is now on the line doing initial set-ups and trouble shooting on the H-model Scorpion's E-9 radar system.

"We've got the general run-of-the mill kind of troubles down pretty pat now, thanks both to the classes and our increasing experience," remarks Abercromby. "Frankly, this system is so complex — there's so much to it — I think anybody would just get lost trying to work it out cold. But while it's a challenge to work with the E-9, it's also real fun to lick it — which we have done. Personally, I appreciate the training I have gotten and know how valuable it is proving in my job."

Another Norcrafter, Harry Cass, a man with some 14 years experience in radar — shipboard during World War II—has this to say:

"I've been through a lot of radar classes prior to the one on E-9 taught here, but I've never been through one as good. Instructors went all out to do a heck of a good job for us, and they got the material over to us individually."

Cass is an electronic check-out man on the radar line.

From the office of the assistant superintendent of Flight Service Administration, Frank Schroeder, comes this observation — "Oh, there's no doubt about it . . . our experience with the E-6 shows that the training on the E-9 is paying off. We are reducing the number of days required for our initial set-ups right along, and are getting better returns in our trouble shooting operations all the time."

First E-9 radar training Norcrafters were graduated to the flight line back in October of last year.

Subsequent, even more advanced, classes in electronics are in prospect at Northrop-Palmdale, as later fire control systems will become a must for Scorpions.

All classes are being programmed by Industrial Training under the direction of Chuck Beuchat.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 14

Published every other Wednesday by
INDUSTRIAL RELATIONS DIVISION, NORTHROP AIRCRAFT, INC.
JOHN B. CLARK, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
Permission to republish material with credit to the Northrop News will be granted
News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

Rides Wanted

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)
SANTA BARBARA & WESTERN AVE., Los Angeles. (Room for 1 rider.) P. F. WALLMAN (5504-21446, Ext. 1424). AX 3-2670. 12-1

(Zone 2)
OLYMPIC BLVD. & INDIANA ST., East L.A. (Consider car pool). A. FERNANDEZ (5621-39971, Ext. 2208). AN 3-7620. 12-2

(Zone 3)
WESTERN & 104TH, Los Angeles. J. R. LINDLEY (5411-17058. Ext. 2186). AX 6-7904. 12-3

(Zone 5)
CARSON & WOODRUFF, Lakewood. (Will wait until 4:15.) STANLEY ROACH (5338-15920, Ext. 680). 12-5

(Zone 9)
MONTE D'ORO & VIA LOS MIRADORES, Hollywood Riviera. (Will share ride with anyone living in Hollywood Riviera.) REX GAMBLE (5238-15660. Ext. 2574), FR 5-5782. 12-9

7:30 a.m. — 4:15 p.m.

(Zone 1)
FRANKLIN & WESTERN, Los Angeles 27. (Route: Wilton-Arlington.) J. R. WARD (9200-43255, Ext. 2177). NO 3-7342 13-1

(Zone 4)
FIRESTONE & OTIS, South Gate. (Via Century or Manchester.) M. BROWN (9350-27999. Ext. 1810). LU 5-3067. 13-4

(Zone 5)
PALO VERDE AVE. & STEARNS, Long Beach. (Will take riders in general Los Altos area or Spring and Bellflower area.) JUD LA FLASH (3148-38983. Ext. 750, 744, 745). HE 4-6921. 13-5

7:30 a.m. — 5:15 p.m.

(Zone 13)
RESEDA & VAN OWEN, Reseda. MAY HAWKINS (4100-13348, Ext. 1972). DI 3-8640. 14-13

4:45 p.m. — 1:15 a.m.

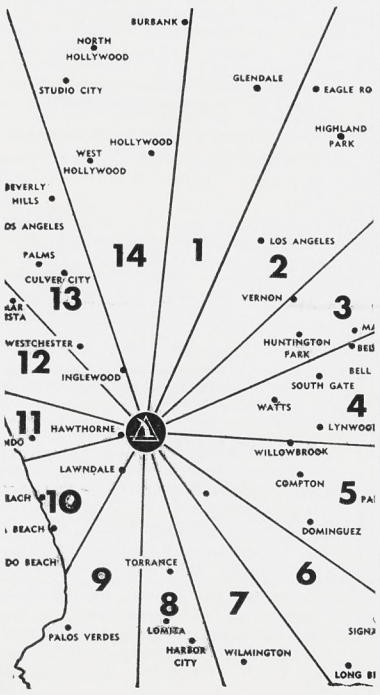
(Zone 2)
FIGUEROA & SANTA BARBARA, Los Angeles 37. (Mariposa, go east as far as Figueroa, north on Hawthorne, Crenshow, Western, Vermont or Figueroa; alternate route via Sepulveda, north on La Tijera.) VICTOR D. LINCOLN (5950-24884, Ext. 1186). AD 3-3084. 18-2

MANCHESTER & NORMANDIE, Los Angeles 44. (Wanted, one or two riders living in the above vicinity willing to go slightly out of the way to accommodate passengers.) MARV LAPICOLA (9340-42984, Ext. 2264). PL 9-5021.

Miscellaneous (Split Shifts)

(Zone 9)
PALOS VERDES DRIVE & SEPULVEDA, Torrance. (Consider car pool; hours: 4:15 p.m. to 12:45 a.m.) R. A. HULME (5530-26614, Ext 1542). FR 5-5604. 20-9

HAWTHORNE AVE. & 177TH, Torrance. (Have room in ranch wagon for three people. Mariposa, hours: 6:45 a.m. to 3:30 p.m.) GEO. STINGER (6230-25355, Ext. 419). FR 9-5351. 20-9



Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 2)
McKINLEY & 53RD ST., Los Angeles. RALPH O. TREADWELL (6720-30, Ext. 1759). AD 1-8911. 2-2

(Zone 5)
BUTLER AVE. & ARTESIA, Long Beach. (I live four blocks out of Compton along Long Beach Freeway & Artesia.) AUDREY G. LAUGHARN (5524-20727, Ext. 2634). NE 1-7276. 2-5

(Zone 8)
CRENSHAW & HIGHWAY 101, Torrance. J. E. LYNCH (5163-14885, Ext. 1821). DA 6-5251. 2-8

ARLINGTON & 236TH, Torrance. (Pennsylvania or Crenshaw to Plant 3.) DONALD CAUGHLIN (5520-20609, Ext. 1267). DA 6-7528. 2-8

NARBONNE OR CRENSHAW & 238TH, Torrance. VANCE SANDSTROM (5510-20026, Ext. 2255). DA 6-2522. 2-8

(Zone 9)
MONTE D'ORO & VIA LOS MIRADORES, Hollywood Riviera. (Will share ride with anyone living in Hollywood Riviera.) REX GAMBLE (5238-15660. Ext. 2574), FR 5-5782. 2-9

HERMOSA AVE. AND 10th ST., Hermosa Beach. GAIL FETTERMAN (5352-43827, Ext. 1731). FR 4-6964. 2-10

(Zone 10)
MARINE & HIGHWAY 101, Manhattan Beach. D. E. ARNOLD (5406-16857, Ext. 2220). FR 4-4019. 2-10

(Zone 12)
FREEMAN & LENNOX BLVDS., Lennox. (Could meet at Freeman & Imperial or Lennox & Inglewood Ave.) HARRY J. NIKKEL (5508-19565, Ext. 2764). OR 7-0402. 2-12

(Zone 13)
FREEMAN & HILLCREST, Inglewood. VIRGIL MAGNUSON (5504-43781, Ext. 1808). OR 7-8427. 2-13

(Zone 13)
WASHINGTON BLVD. & HIGUERA ST., Culver City. CLARA McKELLAR (5621-23923, Ext. 2649). VE 8-6289. 2-13

7:30 a.m. — 4:15 p.m.

(Zone 1)
BUCKINGHAM & SANTA BARBARA, Los Angeles 8. JULIE ELLIOTT (3420-13108, Ext. 626, 444). AX 4-3791. 3-1

CRENSHAW & 104TH (Near Century Blvd.), Inglewood. BARBARA K. GRAY (3120-43837, Ext. 1551). PL 6-3004. 3-1

FLORENCE & 8TH AVE., Los Angeles. RUTH ROUGHEN (3121-43815, Ext. 1238). PL 9-4954. 3-1

(Zone 4)
IMPERIAL & VERMONT, Los Angeles 44. FAYE HILL (8400-43810, Ext. 1492). PL 4-0797. 3-4

LIBERTY AND CHESTNUT, South Gate. WILLIAM M. GREENE (5162-15076, Ext. 402). LO 7-6124. 3-4

(Zone 6)
COMPTON BLVD. & VERMONT AVE., Gardena. JO ANN PUTNAM (4220-13592, Ext. 1622). DA 9-7075. 3-6

(Zone 6)
VAN NESS & 144TH ST., Gardena. DOROTHY ELLIS (9350-27954, Ext. 474). DA 9-4381. 3-6

(Zone 9)
OSAGE & 149TH, Lawndale. JOAN M. TUSTISON (1810-24210. Ext. 2651). OS 6-2019. 3-9

CARSON & VICKI, Torrance. ANN OLIVIERI (3120-11999. Ext. 1551). FR 4-6013. 3-9

HAWTHORNE & REDONDO BEACH BLVD., Redondo Beach. TOM YATES (9350-43763, Ext. 1598). FR 9-2752. 3-9

(Zone 10)
STRAND STREET, Manhattan Beach. JAMES MULHOLLAND (7510-43818. Ext. 2068, 2162). 3-10

INGLEWOOD AVE. & EL SEGUNDO BLVD., Hawthorne. GILBERT L. BENEZE (5262-24614. Ext. 2105). 3-10

(Zone 14)
RODEO & LA BREA, Los Angeles. BARBARA BAKER (5142-14373, Ext. 713).

4:45 p.m. — 1:15 a.m.

(Zone 3)
HUNTINGTON DRIVE & FIRST AVE., Arcadia. (Would like to join car pool or pay per ride offered.) FRANK ALLO PENNA (5940-43837. Ext. 2661). DOuglas 6-4577. 8-3

(Zone 4)
IMPERIAL & BROADWAY, Los Angeles. WILLIAM O. HAYHURST (3000-43049, Ext. 1782, 1203. 2353). 8-4

MC Ballots Hampton to Prexy Post

Ralph Hampton, of the Specifications section, Engineering Administration, has been elected president of the Northrop Management Club for 1956-57, it has been announced.

Hampton will take office on April 6, when the organization holds its regular bi-monthly meeting at the Rodger Young Auditorium, according to W. F. "Scotty" Smith, outgoing prexy.

Other election results — released by R. A. Phillips, Manufacturing Engineering Methods, who was election chairman — showed that Johnny Dew, Outer Wing Installation, won the vice-presidency; and that Carl Liedtke, Machine Shop, nights, was elected night shift vice-president.

The secretary spot for the coming MC year went to Bill Fox, F-89 Fuselage Assembly. Howard Childers, Engineering Laboratories, won the contest for treasurer, and Les Phipps, Plant Protection, nights, led the balloting for the sergeant-at-arms position.

The new MC president named his committee chairmen late last week. They include Harry Herranen, Northrop News—Publicity; Ken Davidson, Wage and Salary—Education; Al Kendall, Quality Control—Facilities; Bob Rust, Finance—Finance committee; Al Rathbun, Engineering—Membership; C. D. Swearingen, Manufacturing — Program; and Larry Poynter, Finance—Tickets. The chairmen will join the new officers in forming the MC board of control.

The April meeting will offer a top management speaker, in addition to other features customarily associated with Management Club meetings. Prime rib is the menu attraction. Members will be informed of details both by bulletin and by announcement in the next issue of the Northrop News.

RIDES WANTED

4:45 p.m. — 1:15 a.m.

(Zone 5)
PALO VERDE & WOODRUFF, Lakewood. (Car pool considered.) JOHN OWENS (5352-16301, Ext. 2382). GA 9-7998. 8-5

(Zone 10)
MANHATTAN BEACH, (Ride home only.) JOHN DE MASO (5224-39240, Ext. 1259). OS 5-6321. 8-10

Miscellaneous—Split Shift

(Zone 4)
IMPERIAL BLVD. & ATLANTIC BLVD., South Gate. (Will trade rides. Hours: 4:15 p.m. to 12:45 a.m.) ELEANOR FOREMAN (5262-33631, Ext. 2541). LO 6-6396. 10-4

(Zone 9)
PALOS VERDES DRIVE & SEPULVEDA, Torrance. (Consider car pool; hours: 4:15 p.m. to 12:45 a.m.) R. A. HULME (5530-26614, Ext 1542). FR 5-5604.

(Zone 12)
WILSHIRE BLVD. OR SANTA MONICA BLVD. & 3RD, Santa Monica. (I will meet anybody at any point close to either of these two boulevards or make other arrangements to suit convenience. Hours: 4:15 p.m. to 12:45 a.m.) MARVIN WEINER (9350-43826, Ext. 2635 or 474). 10-12

MANCHESTER & LA TIJERA, Los Angeles 45. (Hours: 4:15 p.m. to 12:45 a.m.) L. CHRISTMAN (5538-42687, Ext. 525). OR 7-0341. 10-12

OCEAN PARK & 31ST ST., Santa Monica. (Hours: 4:15 p.m. to 12:45 a.m.) D. A. BARILOTTI (5538-43054. Ext. 525). EX 6-0905. 10-12

(Zone 14)
CRENSHAW & FLORENCE, Los Angeles. (Hours: 4:15 p.m. to 12:45 a.m.) MYRNA WALSH (9330-38626, Ext. 2228). PL 1-6418. 10-14

Financial Reports

NOR-AID

First Quarter—Aug., Sept., Oct. of 1955

RECEIPTS

Employee Designations to NOR-AID:		
Hawthorne Facility	$12,213.70	
Anaheim Facility	609.15	$12,822.85

DISBURSEMENTS

Assistance to Northrop Employees:			
Hawthorne (6)	$ 1,214.68		
LAX (1)	150.00		
Palmdale (1)	175.00	1,539.68	
Miscellaneous Operating Expense			
Bank Charges		3.97	1,543.65
			$11,279.20

FUNDS AS OF 31 OCTOBER 1955

Bank of America, Hawthorne	$11,279.20

Second Quarter—Nov., Dec. of 1955 and Jan. 1956

FUNDS AS OF NOVEMBER 1, 1955 ..... $11,279.20

RECEIPTS

N.A.I. Management Club Contribution		$ 181.92	
Employee Designations to NOR-AID:			
Hawthorne Facility	$781.05		
Anaheim Facility	20.84		
Florida Facility	274.50	1,076.39	1,258.31
			$12,537.51

DISBURSEMENTS

Assistance to Northrop Employees:			
Hawthorne (25)	$4,730.85		
Palmdale (3)	400.00		
Anaheim (1)	200.00		
Edwards (1)	214.96		
Ontario (1)	200.00	5,745.81	
Miscellaneous Operating Expense:			
Comparing Articles of Inc. and Cost of Seal		3.00	5,748.81
			$ 6,788.70

FUNDS AS OF 31 JANUARY 1956

Bank of America, Hawthorne	$ 6,788.70

AID

(Projected Pledges)
August, 1955 — July 31, 1956

Detail	Florida Facility		Hawthorne* Anaheim Facilities
Total Pledges	$6,917.00		$208,656.10
Less: Designated Pledges			
NOR-AID	$274.50	$13,899.24	
All Others	$734.00	$35,665.14	
	$1,008.50		$ 49,564.38
Undesignated Pledges	$5,908.50		$159,091.72
NOR-AID Allocation (Other than designations)	$1,476.88		$ 39,772.93
	$4,431.62		$119,318.79
Less: AID Administrative Cost	$ 355.53		$ 10,724.92
	$4,076.09		$108,593.87

Balance to be distributed to the AID causes in all communities in which NAI employees are interested, subject to collection.

APPROXIMATE DISTRIBUTION

American Cancer Society	$ 2,486.91
American Red Cross Chapters	22,776.67
Arthritis and Rheumatism Foundation	338.31
Braille Institute	269.10
City of Hope	2,237.49
Community Chest	72,430.64
Crippled Children's Society	2,171.88
Heart Association	1,733.32
Multiple Sclerosis Society	485.39
Sister Kenny Foundation	1,406.05
YMCA—Metropolitan Los Angeles	2,258.11
(Subject to Collection—estimated)	$108,593.87

The organizations listed under "Approximate Distribution" will participate in each of the forty-three (43) communities covered by NAI employees, except for YMCA, which is in the Community Chest in all areas except metropolitan Los Angeles.

*Includes Edwards, LAX, Ontario, and Palmdale.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — noon Wednesday one week before publication.

FOR SALE

VIEW LOT, Loma Vista Estates, 95'x130'. FR 4-1994. A

AERATOR, motor, air pump, for fish aquariums, $11.50. PL 4-3939. A

STOVE, O'Keefe & Merritt, 5 months old, 4 burners, griddle in middle, cost $289. $175. EDNA PARKER, FR 5-3259.

IRONER, Ward's electric, foot pressure feed, $37.50; TIRE CHAINS, 6.50x16, never used, $6.50. R. L. RICKARD, CH 7-8296. A

REFRIGERATOR, 1949 Philco, 7½ cu. ft., $75. EX 8-2907. A

DAVENPORT, bed, matching club chair, $40. EHRIG, OR 8-4170. A

SUPERCHARGER, 1954 McCulloch, for '49-'53 Ford and Mercury V8. $175. FRANK DILLON. Write to Northrop News, Box 1415. A

HOUSE, 3 bedroom, w/w carpeting, lot 50'x120', 15 min. from Northrop, 3 years old; DIVAN, overstuffed CHAIR, slip covers; COFFEE TABLE; TIER TABLE. W. M. FRANKUM. FR 9-1309, after 4:30, and weekends. A

REFRIGERATOR, GE, top coils, $25; CROSLEY SHELVADOR, $15; living room CHAIR, $10; BEDROOM SET, $50; TWIN BEDS, iron, no springs, mattress, $5 each; COFFEE TABLE, tile, $20; ¼" DRILL MOTOR, $10; fireplace MANTEL free. W. C. GREAYER, FA 8-0616. A

SILVERWARE SET, 62 pc. quadruple plated, modern design, $40. FR 5-9885. evenings or weekends. A

POWER LAWN MOWER, Toro, 21", 1.5 h.p. Briggs & Stratton engine. $70, cost $180. R. LE VESQUE. EX 7-3004. A

HOUSE TRAILER, 19', electric brakes, new tires, butane heater, stove, $495. PAUL E. NICHOLS. LO 6-1643. A

HOUSE TRAILER, 1953 Kenskill, 37', 33' aluminum awning, full bath and shower, E-Z lift trailer hitch, equity $1500, $3500 full price, cost $7000 new. ARTHUR R. OSBORNE, OS 6-3671. A

REVOLVER, .38 special Colt, 6" barrel, holster, cleaning rod, $50. R. W. FRENCH OR 4-5974. A

DINETTE SET, chrome, Virtue Bros. table, 6 chairs. DA 3-0634, evenings. A

GAS RANGE, 36", O'Keefe & Merritt, 4 years old, $75. J. W. CONROY, FR 4-4282, after 4:30 p.m. A

HIGH CHAIR, converts into play table; STROLLER; small TRICYCLE; complete 1940 Hudson MOTOR, make offer. JACK H. CLARK, DA 6-7627. A

FREEZER, Orley Freezemaster, 16 cu. ft., chest type, cost $600, $150. PL 6-9332.

SOFA, Simmons Hide-A-Bed. $65; blonde DINING ROOM TABLE, 6 upholstered chairs, $35. A. C. FRAZER. Write to Northrop News, Box 1411. A

BICYCLES, boy's 20", $15; 24" lightweight, needs tires and tubes, $10. G. J. KENNELLY. Write to Northrop News, Box 1410. A

CHEVROLET PARTS, for 1941, left front fender, grill, hood, head, and generator, make offer. BOBBY B. RAY, OS 5-1718. A

PIANO, Mason 4'6" baby grand, $675, payments $21.90 month. FR 4-3584. A

GAS RANGE, Tappan, 4 burners, glass oven door, $25. AL HERRING, OS 5-4994. A

CHAIR, upholstered, slip cover, cost $100, reasonable offer. OS 6-5491. A

BABEE-TENDA and chair, $10. W. W. KELLY. PL 4-9637. A

AIRPLANE, Stinson, 4-place, 150 h.p. motor, 2-way radio, licensed to Sept. '56; SHOP SMITH complete, all attachments, no reasonable offer refused. PL 5-2908, after 6:30 p.m. A

TV, 16" console, $25; BICYCLE SPEEDOMETER, $2.50. B. P. BRADY. DA 9-5646. A

HOUSE, 2-bedroom and den, 2 blocks from Northrop, narrow lot, $10,500. JACK R. AKIN. OS 6-0236. A

STUDIO COUCH, cushions, custom built, 5'-6" length, $35. T. A. ROBINSON, FR 5-2775. A

WASHER, Thor semi-automatic, 4½ years old. $35 or offer. A. LASSOFF, OS 5-4345. A

GAS STOVE, Kalamazoo, 4 burners, table top, white. $35. NINA L. SHANNON. Write to Northrop News, Box 1408. A

BATTERY, marine, 6 volt, 175 amps., 16"x7"x8¾" dry, with electrolyte, $25. E. C. ERTZ, FR 5-4432. A

CHROME SET, oval table, 4 chairs, $40. HELEN WHITE, OR 2-7074. A

BOAT, 12'. Birchcraft, no deck, $100; 7½ h.p. Evinrude MOTOR, $100; tubular steel beam BOAT TRAILER, $100; 2 Indo-China LAMPS, $7.50. HUGH LOMAS. TO 4-1081. A

SAW, 8" Craftsman, ¾ h.p. motor, stand, 8" extension, 4" PLANER, ½" SKILL DRILL, stand, many extras, $170; Crosley 17" TV, console, $60; 2 shag RUGS, 4'x6', one pad, $10. GL 4-4359.

CAMERA, Polaroid Land, model 95, flashholder, light meter, case, $55. M. MASSEY. TO 4-6261. A

FOR SALE

ICE SKATES, CCM figure, 1 pair women's size 9, complete, $8; men's, boots only, size 10, $3. GORDON D. MADISON. Write to Northrop News, Box 1406. A

TRAILER, '56 model, 23', tub, shower, tandem wheels, new condition, $250 down, $68 month includes 3 years' insurance. R. B. VAN PELT. Write to Northrop News, Box 1404. A

PORTABLE IRONER. General Electric, $30. NE 1-4712. A

LIVING ROOM SET, modern, dark green; BABY BUGGY, collapsible. PATT RILEY. DA 3-0707. A

RIFLE, .270 Ackley Magnum, custom stock, K-4 Weaver scope, 40 rounds ammo., carrying case. W. HENRICH, FR 4-5412. A

TIRES, 600x16, 2 U. S. Royal, 2 Goodrich, $15 each. BEULAH M. GATTIAN, OS 6-2162. A

AUTOMATIC WASHER, Bendix, $30; Coldspot REFRIGERATOR, $30. L. T. HILL. Write to Northrop News, Box 1403. A

GAS HEATER, radiant, $5; Electric HOT PLATE, 2 burner; DINETTE SET, extension, 4 chairs; mahogany DRESSER, reasonable. WE 6-4886. A

AUTO RADIO, Philco, out of Studebaker, $15. OR 2-7628. A

CAR RADIO, 6 volt, Motorola, universal, $10. WALT WARREN. Write to Northrop News, Box 1402. A

PLAY PEN, Baby Line, used one month, $12; Modern FURNITURE, bed, davenport, chair, 2 end tables, $160. F. F. WILTZ. PL 6-6070. A

STORE, hardware and variety, Los Angeles, partnership being dissolved. M. W. COLLEY, WHitehall 2-6454, Lancaster. A

SKI EQUIPMENT, skis, Northland, 7' steel edges; ski boots, Hinki, size 9D; fiberglass poles; ski rack for convert., used one season. $60; BOW, Paul Brown recurve 40 lb., target, 6 arrows, $30; HO gauge MODEL RAILROAD EQUIP., Mantan Shifter, 10 cars—need repair, $10. ROBERT H. HORTON, DU 9-7789, after 5 p.m. A

HOUSE, Palmdale, available April 1, 3-bedroom, air conditioning, fenced, 2 years old, payments $65, 4¼% interest, equity $2,000, $10,750. Write to Northrop News, Box 1414. A

DEEP FREEZE, 12 cu. ft., cost $350, 3 years old. $150. W. K. BURNSIDE. Write to Northrop News, Box 1413. A

BUNK BEDS, metal, strong, $25, with mattresses. WILLARD DENNIS, JR., TO 1-4391. A

BABY BED, spring, mattress, $25; BABY BUGGY, Welsh, $17.50. GEORGE E. KOPP, OR 1-6469. A

PIANO, small upright, bench, student sheet music, $150 all; SCHWINN BIKES, boy's racing, $25; girl's, $10; CAR RACKS for top, $4; 14'x14' UMBRELLA TENT, $20. JOHN A. CABLE, FR 2-0149.

HOUSE PLANTS, PLANTERS. LES DHANES. GR 8-2318. A

TV, 12½" Hallicrafter, $30. L. WISE, EX 8-1390. A

ELECTRIC OVEN, Westinghouse, stand, timer, broiler, $25; Chihuahua PUPPY, long coat AKC registered, $50. W. A. GEIERSBACH. DA 4-3018. A

TV, 17" Muntz, $50; Revere 16 mm mag. CAMERA, $40; TRAILER, teardrop type, home made, sleeps 2, kitchen, ice box stove, $60. T. M. CHARLES, PL 8-2818. A

BED, single, mattress, springs, Mr. and Mrs. CHEST, mirror; NIGHT STAND; CHAIR; 2 LAMPS. AX 5-1679. A

ELECTRONIC INSTRUMENTS, Heathkit signal generator, $18; G.D.O., $16; wattmeter, $35; cap. bridge, $18; vol. calib., $9, or all for $83. DA 4-8177.

DINETTE SET, 4 chairs, $25; dining room CEILING FIXTURE, $5; RADIO, table model Bendix, $15. LARRY LAUER. FR 4-4140. A

PLAYHOUSE, 6'x8', permanent construction, cabinets, sink, linoleum, delivered and erected. M. VINCENT, FR 5-9797.

HOUSE, Los Altos area, five room, attached garage, covered patio, drapes, fenced. $11,000; will consider selling FURNITURE separately. HE 3-8112. A

OUTBOARD MOTORS, 2 like new, 30 h.p. Scott Atwater; 11' glassed runabout BOAT, 7½ h.p. motor, $400. FR. 4-2190. A

HOUSE, 5 bedrooms, 1½ baths, furnished, operating as bachelor quarters, income $45 week, $2500 cash, balance $9950, $71 month including taxes and insurance, 4½% GI loan, Lancaster. MERTON DIETZEL, WHitehall 2-2839. A

HOUSE, 3 bedroom, R-2 lot, Hawthorne, $9000, $3000; SLIDING DOOR, 7'x10', and hardware, $10; KITCHEN BAR, 30"x60", custom, $15; SIGN PAINTER'S SET, $10; DINING TABLE, blonde, chairs, $40; WATER HEATER, 40 gal., elec., $5; or offer, must sell, leaving town. LARRY MOIR, FR 4-3253. A

GAS STOVES, 2 white enamel, $35 and $25. E. C. VALIQUETTE, PL 4-2570. A

FOR SALE

PRESSURE COOKER, Presto Fry-Master, model 400, used once, $10. ROY A. BALLING, VE 9-7378. A

GAS RANGE, Wedgewood, 4 burners, center grill, cost $295, $95. LOUIS TESTAGUZZA, LAwrence 2-4468. A

GUN, Smith & Wesson, K22 Masterpiece, approx. 2 years old, and leather holster, $70. G. F. BRANNUM, OR 7-1621. A

HOLLYWOOD BED, twin size, $25. DA 9-5912. A

RECORDS, 78 r.p.m., classical; mahogany drop-leaf TABLE; full size WORK BENCH, make offer. J. R. THORNTON, FR 4-3253. A

STUDIO COUCH, two-piece, red; CHAIR; blonde COFFEE TABLE; 2 END TABLES, fair condition, $50. THOMAS L. REEVE, ME 0-1364. A

WATER HEATER, gas, 30 gallon capacity, $25. K. G. HART. FR 2-2514. A

KITCHEN SINK, metal cabinet, $30; WATER HEATER, used, $20 gal., $10. CASH REGISTER, National, $55. S. B. MICEK. OR 7-1792. A

TV, 17" Hoffman, $55. BO. LO 9-6911.

WIRE RECORDER, portable, 78 r.p.m. record player, extra wire spools, $39. HALL EVANS. AX 4-7304. A

HOUSE TRAILER, 1947, 23', stove, refrigerator, '56 license, sleeps 4, $400. NE 5-5387. A

FLY ROD, hand wrapped fiber glass; South Bend Oren-O-Matic REEL. $35. PL 9-5233, after 4:30. A

BOAT, car top, 120 lb., 12', 51" beam, $150; Rubber LIFE RAFT, $10; Johnson OUTBOARD MOTOR, 10 h.p., $200; SPRAY PAINT COMPRESSOR, 1/3 h.p. motor, $40. FR 2-2990. A

WASHING MACHINE, Bendix, model 51, auto., $50. MARRACINO, PL 5-4511. A

ROLLER SKATES, Ladies', Chicago, size 5½, case included, $15. E. H. RUSA, OS 5-2852. A

DIVAN, two-piece sectional, gray tweed, used three months, $50. F. W. PRIEST, FR 5-3521. A

REVOLVER, .38 Special, S & W blue-steel, 5" barrel, cost $67.50, $30. VIC LINCOLN, AD 3-3084, after 1 p.m. A

BABEE-TENDA and CHAIR, $10. W. W. KELLY, PL 4-9637. A

AIRPLANE, 1947 Taylorcraft, metal prop, battery pack radio, in storage 4 years, needs fabric, $375. JAMES WILSON, OS 5-2518. A

POOL TABLE, Brunswick Champion cushion, balls, cues, ball rack included. $125; BABY BED—CHEST OF DRAWERS, combination, $10. JEANNINE WEATHERS, PL 4-3665. A

TONNEAU COVER for M.G., white, make offer. FR 9-5898, after 6:30 p.m. A

TAP, DIE, DRILL SET, Greenfield, never used. 36 taps and dies from ¼" to 1", 4 handles, N.C. thread, $55. C. M. CALLAWAY, OS 5-6016. A

TV, Traveler, 21", mahogany table model, antenna, 1 year old, $75. OS 6-1684, after 4:00 p.m. A

LIVING ROOM SUITE, green frieze; Pennsylvania Junior LAWNMOWER, excellent condition. DA 4-4410. A

TV, 17" Zenith, mahogany console, $65; TRAINING WHEELS for bike, $2.50. MAX STERN, DA 4-6748. A

DINING ROOM SET, mahogany, Duncan-Phyfe, buffet, 6 upholstered chairs, $125. KAROLL SHURTZ, OS 6-0363. A

TELEPHOTO LENS, 38mm, F/3.5, fits standard screw-in lens mounts, $25. J. B. McMANUS. FR 9-9926. A

CABIN CRUISER, 1955, 21' Owens, 96 h.p. inboard, sleeps 3, galley, head, complete cover, all Coast Guard required equipment, $3200. AT 9-2696.

TWIN BED, one springs, mattress; matching four-drawer CHEST, $30. R. A. HULME FR 5-5604. A

TRAILER, 33' Rollaway, near-new awning, modern, $2000. PL 5-4323, after 10:00 a.m. A

IRONER GE portable, used twice, $30. NE 1-4712. A

DUAL MANIFOLD, Offenhouser, $15; Harman Collins IGNITION, $20, fits Ford '49-'51. HANSEL KNIGHT. Write to Northrop News, Box 1420. A

HOUSE TRAILER, 30', one-bedroom, shower and stool, built-in TV included, reasonable. OS 6-9754. A

WRINGER WASHER, 1953 Kenmore, $35. OS 5-8909. A

BOOTS, Gokey Botte Sauvage, 18" high, size 8D, cost $50, $20; 5 FISHING POLES, $25. JOHN. OS 5-2885, after 12 noon. A

WHEEL CHAIR; INVALID WALKER, reasonable. F. G. NICOLAY, TE 0-5139. A

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

FOR SALE

GUN, .300 Savage Model EG, never been fired, best offer. DAVID L. YOUNG, PL 4-6983. A

TRAILER, two-wheel, 4' x 6', overload springs, 2-way tail light, best offer over $40. Anaheim. KEystone 5-1722, after 5 p.m. A

DINING TABLE, 6 chairs, blonde, modern. $50. B. M. STALEY, OS 6-7519. A

MEMBERSHIP, Vic Tanny Gym. $45, 8 months membership. RICHARD LARSON, OR 2-9702. A

M.I.T. RAD. LAB SERIES, Vols. 1 and 5; ELECTRIC SHAVER, $8; FARBERWARE ELECTRIC BROILER, $15; CRAFTSMAN SKILLSAW, $40. OR 8-6548. A

ELECTRIC SHAVER, Remington Dual Head, best offer. M. BROWN, LU 5-3067. A

HORSE, small filly, 10 mo. old, gentle, $55 or best offer. PL 5-6610. A

MOVIE OUTFIT, 16mm sound and silent; STEREO OUTFIT; portable WIRE RECORDER-RECORD PLAYER. DENVER HOWARD, OS 5-5829. A

CONCERT GUITAR, Martin tenor and case; Electrolux VACUUM CLEANER, attachments. ALICE BASSETT, PL 4-3554 evenings. A

BOAT, 12' runabout, outboard motor, trailer, remote controls, $275. EX 7-5938. A

SOFA BED, CHAIR, wrought iron legs; matching end tables. DA 9-6765. A

SPEEDBOAT, 15' inboard, seats 5, modified Ford "60" engine, with trailer, $950. W. F. WAGNER, VE 8-4512. A

MILLING MACHINE, Diamond M-24T, Rusnok vertical head, 1 h.p. single phase motor, 1" arbor 8" rotary table, 4" swivel vise, Criterion boring head, collets, end-mill holders, angle plates, cutting tools, $1200. PL 4-1096. A

BEDS, twin maple, mattress and springs, $12 each; planter TABLE LAMPS, $4 each; brass TABLE LAMP, $5; SCATTER RUGS, one 3'x5', $5, one 2'x4', $4; three 3'x4', $1 each. PL 6-7337. A

BOAT, 12' plywood, glassed, new paint, $85. G. H. JONES, GA 9-3121 after 5 p.m. A

HOUSE, 3 bedroom, low down, will G.I. Near school and transportation. OR 1-4016. A

REFRIGERETTE, Servel Wonderbar, $75. OR 7-2212 after 5 p.m. A

CONTOUR CHAIR, Birk-Loc, green plastic, blonde frame. OS 5-7993. A

WANTED TO BUY

KILN, small size, for home use. MARIAN T. NORTHRUP, AX 1-6653. B

TRANSPORTATION CAR, small, good condition, $75 maximum. B. P. BRADY, DA 9-5646. B

USED CLOTHING, quality, ladies', children's. JAMES O. WOOD, OR 2-7494.

PICK-UP, Chevy or Ford 6, ½ ton, '54 or later, good condition, priced for cash. FRANK ROSE, AX 1-8908, after 4:30 p.m. B

TYPEWRITER, prefer Royal. ARMIN LIEBICH, PL 2-9597. B

HIGH CHAIR, Baby Butler, reasonable. W. C. FRANTZ, DA 4-0100. B

RABBIT, young black Silver Martin buck. PL 5-5044. B

BICYCLE, girl's 20" or 24" lightweight or middleweight. G. J. KENNELLY. Write to Northrop News, Box 1409. B

SEWING MACHINE, either Singer or White, old treadle. ROY L. WHITE, PL 4-6865, evenings. B

TIRES, two 6.70x15. OS 5-1847. B

PICK-UP TRUCK, small; PICKET FENCE, used, good condition; SOIL, good fill, suitable for flower beds. I. M. PATTERSON OR 4-4032. B

CLARINET, B-flat, wood, good condition. H. W. HENDERSON. EX 6-9082. B

CONCRETE MIXER. R. WALLEN, FR 2-3795. B

FLOWER POTS, used 12" or larger, regular or glazed, reasonable. OS 5-7993. B

GUNS: high powered rifle and shotgun, reasonable, will consider old gun if cheap enough to allow for repairing. Write to Northrop News, Box 1423. B

HOUSE, 2 or 3 bedroom, Gardena or North Torrance area, low down payment, from owner. P. L. BRENT. DA 9-7339. B

FOR TRADE

CONVERTIBLE TOP for '56 Thunderbird, trade for '55 or '56 T-Bird hard-top. W. HENRICH, FR 4-5412. C

LOTS, four (82½ x 125) Quartz Hill, 7 miles from Palmdale, water and electricity, trade for Los Angeles property. What have you? E. M. MOODY, WE 1-3359 after 5 p.m. or weekends. C

MOTORCYCLE ENGINES, 28 Harley single w/transmission, Royal Enfield 125cc disassembled, portable V.T.V.M. to 3000 volt AC-DC, want typewriter, camera, binoculars. EX 7-5938. C

FOR SALE OR TRADE

RANGE, table top, Gaffers & Sattler, $25, or will trade for TV set in working condition. TO 1-4391. M

WIRE RECORDER, RCA; GE 1.5 h.p. heavy-duty MOTOR; RCA 40-watt POWER AMPLIFIER; Duncan-Phyfe chrome DINETTE SET. W. S. COOK, DA 6-2467, evenings or weekends. M

FOR SALE OR TRADE

INCOME PROPERTY, 1 store, 4 apartments, income $300 month, $5000 down or small home as down payment, $26,500. EDNA DE VARKIN, NE 8-1413.

TRAILER, ¾ ton Sears Bradley, stakes, canvas cover, $75, or trade for ½ h.p. Skilsaw; INCINERATOR, large size. $5. CHARLES E. MANNING, DA 9-2847. M

HOUSE, 3 bedroom, garage, fenced, near school, shopping, Gardena, trade equity for clear late model car or house in Garden Grove or vicinity. Write to Northrop News, Box 1424. M

BOXER, puppy, female, 6 mos. old, all shots, ears cropped, AKC championship stock, $125 or lease for choice of pups in first 2 litters. Write to Northrop News, Box 1425. M

LAND, 11/10 acres, near Riverside, Calif., low down, monthly payments, or trade for property in Fullerton or Santa Ana. LEO W. DAY. Write to Northrop News, Box 1421. M

FREE (To be given away)

DOG, male, 10 mos. old English Walker and cocker spaniel; DOG HOUSE; TURTLE and bowl; 2 GOLD FISH and bowl. FR 9-7066, after 5 p.m. D

RENTALS OFFERED

TRAILER, modern, 3-room, with awning, $46 month. PL 4-2570. E

HOUSE, double garage, large yard, children and pets O.K., Century-Western, available March 20. KEN. GUERTIN, PL 4-9309. E

ROOM, private bath and entrance, Hawthorne. OS 6-9145. E

ROOM, single bed, room with another fellow, 3 blocks from Plant 1. $7. A. E. FRY, OS 6-9567. E

HOUSE, furnished, 1½ bedroom, large yard, near Northrop, children welcome. PL 4-4423. E

HOUSE, 3 room, kitchen furnished, utilities paid, take one small child, no pets, $60 month. L. B. ADAMS, OS 6-3069. E

APARTMENT, Crenshaw - Century area, new, 1 bedroom, unfurnished, disposal, garage adults, $82.50. FAE ROSER, OR 2-5746, after 4:30 p.m., or weekends. E

BACHELOR APARTMENT, fireplace, furnished, one only, North Inglewood, $15 week. L. D. ROWE, OR 7-5367. E

HOUSE, 3 bedroom, 1½ baths, partially furnished, single car garage, Torrance. R. BRANNING, FR 4-3278, after 7 p.m. E

SLEEPING ROOMS, private entrance, any shift, men only, walking distance to Plant. $7 per week. OS 5-2885. E

FURNISHED ROOM, private home, near Northrop. DA 4-4410. E

APARTMENT, modern, 1 bedroom, unfurnished, vicinity Western and 108th St., garage, $70. PL 5-7730. E

SHARE HOUSE, one engineer or Plant 3 personnel share new 3 bedroom, furnished, Palos Verdes, car pool if wanted, $55 month plus utilities. DAVID C. MELTVEDT, FR 5-0688. E

RENTALS WANTED

APARTMENT, 1 bedroom, kitchen, private bath, 1 person, utilities paid, between $50 and $60 month, in Inglewood or Hawthorne area. J. W. LOPEZ. Write to Northrop News, Box 1405. F

HOUSE, 2 bedroom, unfurnished, Southwest area, 3 adults. Inglewood, Hawthorne OK. W. A. SCHWARZ. PL 3-0894.

HOUSE OR APARTMENT, 2 or 3 bedroom, unfurnished or partly furnished, close to Northrop, reasonable, by April 1st. JEANNETTE E. TAYLOR. Write to Northrop News, Box 1417. F

HOUSE, 2 bedroom, fenced yard, unfurnished, allow children, near Northrop, reasonable. BEV KOCH, PL 3-0865. F

HOUSE, one bedroom, or ½ duplex, garage, area for GE washer, and small yard, preferably fenced. KAROLL SHURTZ. OS 6-0393. F

HOUSE, 3 or 4 bedroom, garage, fenced yard, North Torrance or vicinity, possession not later than April 1, will consider leasing. Write to Northrop News, Box 1422. F

CHILD CARE OFFERED

CHILD CARE, one child in my home, Hawthorne. JOSEPH F. FIOLA. OS 6-9145. G

CHILD CARE, ages 3 to 10 yrs., lawn, play yard, fenced, play equipment, near school, day or night shifts. OS 5-7993. G

CHILD CARE WANTED

CHILD CARE, wanted 2 days one week, three days next week, in my home, will provide transportation. Must live in Gardena. DA 9-7176 after 5 p.m. H

PERSONALS

SEWING and ALTERATIONS, ladies' and children, reasonable. FR 2-0012. L

BOOKKEEPING SERVICE, typing, notary, in my home, reliable woman, 11 yrs. exp., local refs. FR 9-9461. L

HELLO to all my friends at Northrop. I expect to be back home within a few months. For now my temporary address is Harbor General Hospital, G-9, Torrance. R. M. HANSEN, DEPARTMENT 5584. L

N.R.C. Good Time Table

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in the Annex every Thursday evening, 7:00 p.m.

BASKETBALL (days), Bob Hughes
Play-offs now in progress. Mondays 6:30 p.m., Fremont High School, Thursdays, 6:30 p.m. John Muir Jr. High School.

BIBLE STUDY
Meet daily, Plant I, east mezzanine conference room, 11:15 a.m.; Plant II, M.W.F. 12:00 conference room M1-B1, T.Th. 12:30, conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30 p.m. Night shift members meet 1st Thursday following day shift meeting, 2:30 p.m.

BOWLING (days), Wayne Chamberlin

BOWLING (nights) Garland Steiner
Fourth annual spring bowling tournament April 21-22 and 28-29. Entry blanks now available in PA office.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m. Next—March 27.

CAMERA CLUB (days), Howard Linnenkohl
Meet 1st & 3rd Friday evening, 7:30 p.m. Next—March 16.

CAMERA CLUB (nights), Gene Beck
Meet 1st & 3rd Saturday, 7:30 p.m. Next—March 17.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30 p.m. Next—March 21.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next—March 28.

GOLF, Andy Titus
GOLF (nights), Pete Lower
Rio Hondo Scotch Foursome Tournament March 25.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

MIXED CHORUS, Florence Graveline
Meet every Tuesday evening, 7:30 p.m.

MODEL CRAFT, William Feldt
Meet 1st and 3rd Monday, 7:30 p.m. Next—March 19.

MODEL RAILROAD CLUB, John Felder
Meet every Sunday morning, 9:00 a.m., and every Thursday evening, 7:30 p.m., 4411 W. Redondo Beach Blvd.

PHILATELIC CLUB, George Borton
Combined philatelic and numismatic meets 2nd and 4th Mondays.

RADIO CLUB, Paul Serafin
Meet last Thursday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller Skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—March 17.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1:00 p.m.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month.

TOASTMASTERS 212 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Next—March 27.

EXCLUSIVELY FOR THE LADIES

BASKETBALL, Pam Thompson
League play Alondra Park Gym, Tuesday evenings.

BOWLING (days), Lee Hopkins
Winter league now in progress. Annual spring tournament entry blanks available in Personnel Activities office, Plants I and III.

INTERIOR DECORATION
Weekly classes in lampshade making every Thursday, 7:30 p.m.

KNITTING
Meet at Clubhouse each Monday evening at 7:30 p.m.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet Tuesdays, 7:00 p.m., Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Hettie Horner
Meet first and third Thursdays, 7 p.m.

SPORTS *The Northrop News*

TOP PIN TOPPLERS

LEAGUE WINNERS—. NRC doubles tourney which ended last month netted trophy wins to the above pictured contestants. Front row, from left: Marge Howsare and Shirley Simpson, women's doubles; Patty Clifton, mixed doubles; Leona Hopkins, women's bowling comish; Ray Hofius, mixed doubles. Back row: Bowling Comish Wayne Chamberlin; William Baker and Hawley Rux, men's doubles. (Spring tourney entry applications are now available; see story.)

ALL-TIME HIGH—. William Baker made history in NRC doubles tourney when he shot 277, 223, 200 games for a series total of 700 points! This score is highest series ever recorded in NRC League or tourney play.

Keglers Slated for Tourney Entry Blanks at PA Offices

Bowlers never rest. As soon as one tournament result is entered in the books — see NRC doubles tourney winners above — these ceaseless competitors make plans for another contest. In this case it will be the fourth annual NRC Spring Bowling tournament which will be rolled on April 21, 22, 28 and 29 at the Windsor Bowl.

Entry blanks are available now at Personnel Activities offices — deadline is April 2.

Top three place wins in the doubles tournament were rolled by the following: men's doubles — W. Baker and H. Rux, 1309; D. Jennings and J. Rhoten, 1295; and N. Elder and P. Reeder, 1208. Women's doubles — S. Simpson and M. Howsare, 1235; F. Grant and H. Braithwaite, 1209; and F. Rice and B. Bolles, 1165. Mixed doubles — P. Clifton and R. Hofius, 1245; S. Mahaffey and R. Gentz, 1242; and D. Grimm and G. Grimm, 1216.

Men's high scratch game went to William Baker for a 277 game (see picture this page) and women's high scratch to Shirley Simpson for a 234 score.

SKIN DIVERS TO LEARN DO'S AND DON'T IN DIVES

Skin diving can be dangerous. Veteran divers have been known to shudder at the antics of neophytes in this thrilling sport.

In an effort to enable a maximum number of Norcrafters to enjoy their club activities with a maximum amount of safety, the night shift Skin Diving club has enlisted the aid of fellow member Ed White in presenting the first NRC underwater diving instruction course.

Ed is a qualified Los Angeles County underwater diving instructor.

The first class meeting will be held on April 7 at the Leuzinger High School swimming pool, 4118 Rosecrans Boulevard, Lawndale. Classes start at 9:00 a.m., continuing until 12 noon. A doctor's certificate or letter certifying examination of the heart and respiratory system is required and must be submitted to the Personnel Activities office prior to April 1.

The first meeting will consist of a lecture and a swimming ability test. Swim suits, towels, and note-taking equipment are in order. Other classes will be held on April 14, 21 and 28. All night shift Norcrafters invited.

PROSPECTORS IN MARCH SEARCH FOR GEM STONES

Pacoima Canyon, near Newhall, is the destination set for the next Gem and Mineral club trek. The group plans to search for zircon, topaz, and limonite in the area and the panning should be good, too, according to Elmer Storm, club comish.

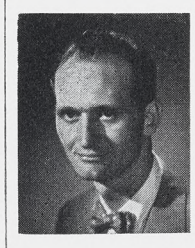
The date set for the trip is the weekend of March 21. One group will leave on Friday evening, March 21, another on Saturday morning, the 22nd, and the last group will take off on Sunday morning, the 23rd, for a one-day search.

The brother club—the Ontario Prospectors — held its annual gem and mineral display at the Orange Hotel in Ontario recently. The display was open to the public and drew a large crowd of interested viewers.

Show prizes were awarded to Club Commissioner Bob Weiller for best of show; Cliff Baker, Jim Edwards, and George Flowers — first, second and third place, respectively — for mineral displays and collections; and to Chet Pool, Val Koch and Hal Wilkerson—same order—in the lapidary classification.

Eastertime Program for NRC Chorus

By HAL HUNSBERGER
President
Northrop Recreation Club



Some of the most beautiful musical compositions ever written are the traditional Easter songs. Norcrafters and their friends will be privileged to hear some of this music when the NRC Mixed Chorus presents its Easter program on Friday, March 30. The group will sing at the NRC clubhouse, starting at 8:00 p.m.

The Chorus will also present an Easter Sunday program at the Sawtelle Veterans' hospital.

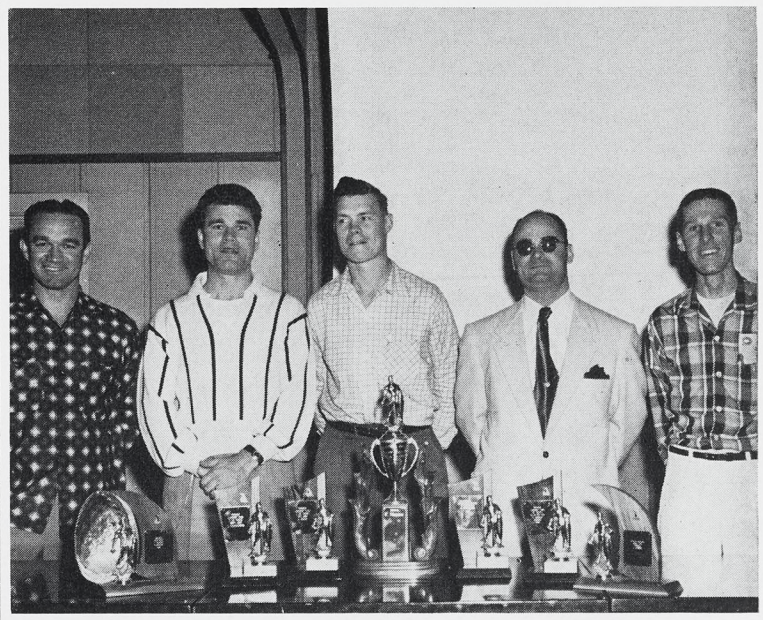
These Norcrafters have been increasingly active in civic musical programs, and recently participated in a Business and Industry Choral festival sponsored by the Los Angeles Bureau of Music. Nine separate choruses, representing many large business institutions, participated.

Each chorus sang individually under direction of its own leader, and as a finale, all choruses combined to sing three Festival numbers, accompanied by the Los Angeles Civic Concert Orchestra conducted by J. Arthur Lewis, music coordinator for the Los Angeles Bureau of Music. TV and radio celebrity Art Baker was guest master of ceremonies.

There are still openings for voices in the chorus. Any Norcrafters interested are invited to attend Chorus meetings on Tuesday evenings at 7:30 p.m., NRC Clubhouse.

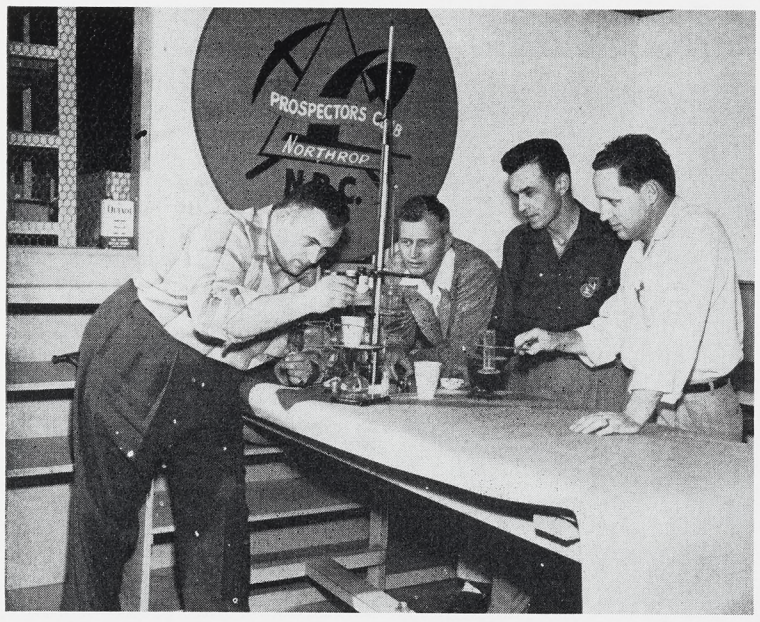
★ ★ ★

The night shift Camera Club had a recent field trip to the San Bernardino National Forest, Big Bear Lake area. The group spent a busy day enjoying the snow, riding the Clifford Lynn chair lift, and visiting the fabulous Santa Claus Village. Between times, they managed to shoot a few pictures.



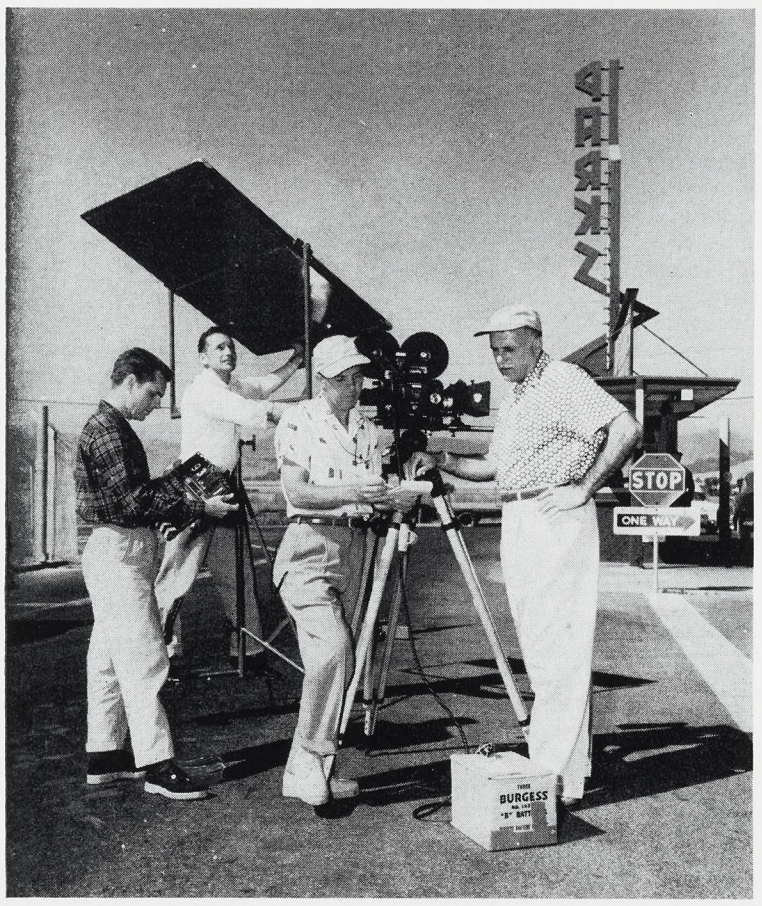
SNORKEL USERS—. Night shift Skin Diving Club members met recently to witness year-end awards presentations. Trophy takers are, from left: Terry Hickman, monthly win; L. H. Vandenberg, monthly—largest fish; Fred Morgan, perpetual trophy and two quarterly awards; Tommy Steelsmith, monthly; Ed F. White, monthly—largest fish. See story, this page.

THE Northrop Scene BY DAY AND NIGHT



Ontario Prospectors Check

ALL THAT GLITTERS—. Ontario Prospectors Club members are shown in NRC lab making chemical analysis of mineral specimen. Left: Comish Bob Weiller, Jim Edwards, Val Koch, George Flowers — George isn't really going to heat that graduate. Club held annual gem and mineral display at Orange Hotel, Ontario, recently. (See story on page 5 for winners).



ON LOCATION during filming of "Airman Smith" movie, Northrop Motion Picture department crew members were photographed: Lyn Sterling; Roy George; Felix Barlow, director of photography; Ed Woodworth, film director. Photo was taken at Parks Air Force base by Al Saiget, film still photographer. Film, made with cooperation of Air Force, depicts life of young man who chooses to wear Air Force blue. Movie will aid in Air Force recruiting program (see story page 1).

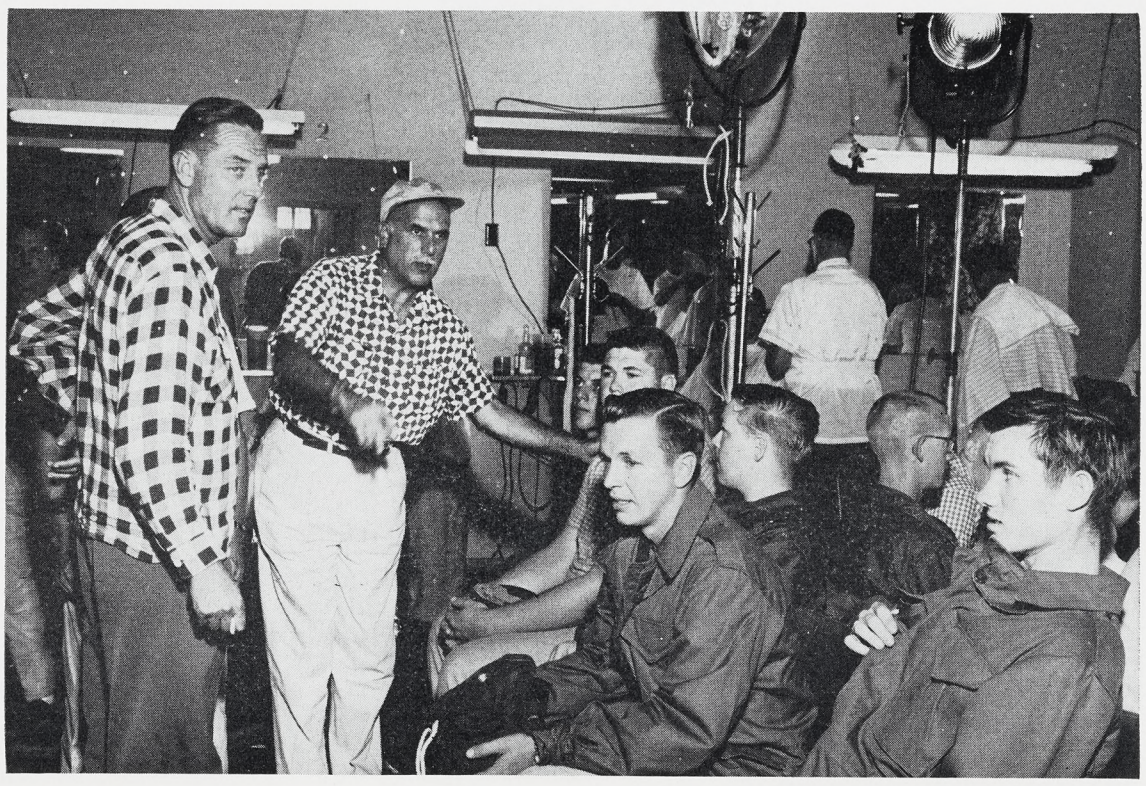
FAMILIAR SCENE—. Shown setting up recruit haircutting scene for "Airman Smith" movie are: Spec Watson, unit manager, and Ed Woodworth, film director. Airman Smith, played by 1st Lt. Leonard R. Smith, is seated, front row, second from right. Boys in pic are all newly indoctrinated members of U.S.A.F.

Quality Control Hosts GE Expert

VALUE ANALYSIS was topic of discussion for Quality Control supervisors at bi-monthly clinic and social gathering recently. Remarks on subject came from top authority on subject, Larry Miles, right, manager of value analysis for General Electric. He is shown with brother George Miles, left, manager of Philippine Power Company, and nephew, Norcrafter Chet Druliner, head of Missile Manufacturing Inspection.

GUESTS at QC social gathering following value analysis clinic included top-level personnel shown. From left: Bob Catlin, director, and Jack Mannion, assistant director, Quality Control; George Gore, secretary and corporation counsel; Vice-presidents R. R. Miller, Administration, and Edgar Schmued, Engineering; F. Penn Holter, assistant to the vice-president, Administration; William F. Ballhaus, chief engineer; and Chet Dunn, project engineer of the SM-62 Weapon System.

Young Men and Jet Aircraft



Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, March 28, 1956

MR. TORNADO

WIND TUNNEL GIANT MOVE

TUNNEL POTENTIAL SIGNIFICANT

A spectacular highway transportation haul — second largest move in Los Angeles County annals—has brought several gigantic sections of the new wind tunnel to Hawthorne.

GIGANTIC SECTIONS of wind tunnel moved early this week from San Pedro to Hawthorne included this corner section. It is approximately 25 feet in inside diameter. Horizontal pattern shows part of turning vanes of tunnel.

Arrival of the sections — and their imminent assembly—points up the continuing importance in the company of research and development aimed at advancing the frontiers of aviation.

The new subsonic wind tunnel required intricate planning by Pacific Crane and Rigging, movers. The largest units were transported late last Monday night and early Tuesday morning, when traffic was at lowest ebb. The sections were fabricated at the Todd Shipyards, San Pedro.

Largest of the sections measured close to 33 feet in diameter. A 45-ton section was the heaviest single piece transported.

Significance of the new tunnel cannot be over-emphasized, R. B. Katkov, chief of Fluid Dynamics, indicated.

He pointed out that the design of the new tunnel combined a number of the best characteristics of several current designs, and that the tunnel could easily be adapted to higher speeds in the future, or could be pressurized safely and efficiently.

"The proper designation of low speed wind tunnel is a bit misleading," Katkov said. "Actually, aerodynamic characteristics up to relatively high subsonic Mach numbers do not change too rapidly. Thus, much of the data obtained in low speed tests can be applied to higher speeds."

In addition, Katkov emphasized, about fifty per cent of all wind tunnel tests, even on supersonic airplanes, must be conducted in low-speed wind tunnels.

Northrop in Finals of LRI Competition

Only Northrop and North American Aviation remained in the Phase One Long Range Interceptor competition last week following the withdrawal of Lockheed Aircraft from that program.

Lockheed's withdrawal from the competition was prompted by the press of other business at that company's facilities, reports carried in AMERICAN AVIATION DAILY and the metropolitan press stated.

Information regarding the Northrop entry has not been available for publication due to security restrictions. The plans were reviewed by the LRI Evaluation Group of the Air Force Source Selection Board in January.

Man to Keep Pace with Speed

Northrop In Top Wins At Distaff Meet

After the tumult and the shouting, ten proud Norcrafters stepped forward to collect top wins in the Los Angeles Women's Bowling Association all-city tournament.

The Scorpions — staffed by Captain Patti Clifton, Lil Dotson, Winnie Smith, Gwen Brewer, and Gloria Hofius — added up a total of 2288 pins to take the Class E division trophy. E division contestants were bracketed in the 650-700 handicap class.

The big Class F trophy—handicap 650 and under — went to the Northrop Snarks captained by Clara Holecheck, with Millie Hartman, Dorothy Lowe, Dorothy Walls, and Evelyn Kmieciak.

Northrop teams in the competition were chosen from a roster of approximately 250 Northrop lady keglers.

NORTHROP NEWS MOVES TO PR

The Northrop News was transferred from Industrial Relations to Public Relations last week, it was announced by Robert R. "Bob" Miller, vice-president, Administration.

News department number changes from 4320 to 1320.

HUMAN ELEMENT IN AIR DESIGNS

Fantastic speeds of tomorrow's airplanes have brought into aircraft a breed of scientists whose fields sound strangely alien.

They are anthropologists, and psychologists, and physiologists, and statistical mathematicians — jaw-breaking terms!

But their studies are vital, for two- to ten-thousand miles per hour talk crowds the daily discussions of aircraft engineers. And the altitudes that were unknown yesterday are within reach today and past conquest tomorrow.

By AIREPORTER

In the feverish activity of mastering air and space, the human element—a central cog in the bewildering world of electronic machines—has been often forgotten.

But while Northrop Engineering keeps pace with amazing electro-mechanical developments, it has not forgotten the human. Its long-established regard for human factors, in fact, has been broadened; the staff of highly qualified Equipment Design personnel has been augmented with a group known as "Human Engineering".

The human factors specialists who make up the new group analyze the human in his relation to the machine. They explore the aircrew's physiological and psy-

(See Man To Keep Pace, Page 2)

Jet Engines Of Tomorrow: 200,000 h.p.

Future jet engines will have to develop 40,000 to 50,000 pounds of thrust — equivalent of 200,000 horsepower! — Welko Gasich, chief of Preliminary Design, predicted at a meeting of the American Society of Mechanical Engineers in Los Angeles.

Gasich, nationally recognized for his studies in advanced aircraft, indicated that speeds of Mach 2 and Mach 3 at 70,000 foot altitudes are now a definite consideration. The new engines would permit speeds approaching 2000 m.p.h., and be designed to require only half the compressor ratio of present day craft.

At the same ASME meetings, in panel discussions featuring test pilots, Lew Nelson, Experimental Flight Test, stressed the necessity for close cooperation between pilots and engineers, particularly on test projects.

New Checks With Raise All Ready for Delivery

This week's paychecks—pleasantly larger by four to six per cent as a result of the general increases announced last Wednesday — are due for completion in Finance departments today, all ready for distribution to night shift tomorrow and day shift on Friday.

The pay increases—plus other considerations included in the general raise — amount to a total of six million dollars annually.

President Whitley C. Collins' bulletin Wednesday outlined a four to six per cent increase in hourly rates, with minimum and maximum of all hourly rate ranges adjusted upward by the same amount. Second shift hourly bonus rose from eight cents per hour to twelve.

Salaried personnel saw their base rates rise by six per cent and the minimum and maximum of their rate ranges advanced by the same amount. The second shift salary bonus of $20 per month was increased to $30.

Liberalized vacation provisions affect Norcrafters with 12 years or more of continuous Northrop service. Hourly personnel eligible get 120 hours of vacation with pay, plus 16 hours sick leave pay. The latter is payable concurrently

(See Pay Checks, page 3)

Temp Went Way Down - But 89s Fly

The impossible became only a little more difficult early this month for the men of the Alaska-based 18th Fighter Interceptor Squadron . . . but they—and their F-89s — performed on schedule, nevertheless.

Northrop Tech Rep Belvin Brigham reported that a fly-by of every ship in the squadron was scheduled for Thursday morning, March 1. The flight was intended to mark the completion of the squadron's past month alert standing, when it had performed the duties normally assigned to two squadrons.

At 8 a.m. of the day scheduled for the fly-by, it was 52 degrees below zero, Fahrenheit!

By noon — take-off time — Ladd AFB had "warmed" up to 31 degrees below . . .

Ordinarily, in temperatures like these, some difficulty can be

(See Thirty-one, Page 2)

BENEFIT TO MEDICINE

MISSILE RESEARCH SHRINKS INVISIBLE

The invisible may soon yield up more of its secrets to medical research as the result of missile studies at Northrop, and thus aid immeasurably in the early diagnosis of cancer or other malignant diseases.

UCLA medical students heard Milburn B. Grier, optical physicist in the Missile Guidance labs, tell of new Northrop developments in microscopy.

Grier described how these developments — reached as part of continuing studies on guidance equipment—can be adapted for chemical analysis of particles as small as .000000000001 of a gram!

The techniques that make the amazing study possible are apparently well ahead of those developed thus far in the medical field.

Special lenses needed for the microscopic research were designed and fabricated at Northrop. Electronic circuitry was developed to enable research personnel to detect the most minute variations in light induced by infinitely small particles of matter in any specimen.

These lenses are usable in the invisible regions of the spectrum to bring "color" out of what normally appears to be darkness.

Research men believe that within this "color in blackness" there may lie the key to an early diagnosis of malignant conditions and to early distinction between malignant and benign cellular conditions in the human body.

The microscopy techniques have been used in the study of advanced photosensors and other electro-mechanical devices used on the Snark missile. The instruments must be rugged and precise to withstand extreme acceleration and to operate accurately to target.

Man To Keep Pace With Speed

(Continued from Page 1)

chological capacities and limitations.

In short, they ally their efforts with design engineers in coming up with an airplane whose peak performance will not be handicapped by human limitations of crews.

Their research will permit more efficient use of the unique human mechanism, and at the same time increase the survival possibility in case of bail-out.

The expanded Human Engineering and Equipment Design section is under the general supervision of Earl Eckerson. There are three major groups—the newly-created Human Factors; Ground Support Equipment, supervised by Paul Williams; and Airborne Equipment, under Fred Mazy.

This design section, under the direction of Jim Crawford, chief of the Airframe-Mechanical Design department, will support human factors aspects in analysis and design of complex ground support equipment required for missiles, as well as manned aircraft.

To protect pilots, equipment design engineers have developed efficient oxygen systems and crew escape systems. They have contributed to design and development of ventilated and pressure suits, special headgear, blast screens, automatic parachutes. Ejection seats are continually improved, and experimentation is currently being conducted on the design of capsules for high-speed, high-altitude escape.

Thorough studies have been made of cockpit controls, instrumentation, and cockpit accommodations to ease the duties of flight crews.

But the blinding speeds that appear imminent, and the vast voids of space that are now nearer, have increased the difficulties that confront designers in their task of keeping the man in control of the machine.

One example illustrates a hazard facing pilots of tomorrow's fighter-interceptors—the threat of a head-on collision at combat altitudes exceeding 10 miles.

A theoretical case has two interceptors flying directly toward each other at Mach 2. The closing rate of speed approximates 2500 miles per hour.

First visual contact would come when only seven seconds of time separation remained between the two aircraft.

In another three seconds a collision is inevitable.

During these three seconds the pilot's response—in order to assure only a reasonable probability of survival—must be not only appropriate, but instantaneous, as well.

To avert the collision without losing control of the aircraft, the pilot must use his total skill, split-second timing, and, most of all, he must have a cockpit with controls, navigational aids, and environmental conditions which were designed into the pilot's work station with the human being in mind.

The example represents only one task confronting the human factors engineer.

Present human factors studies are digging further into time-and-motion studies; into attention and perception processes; into human acceleration and exposure tolerances. Human impressions and responses under strain will come in for closer scrutiny.

The efforts of Human Engineering, in coordination with the Flight Safety section, will insure that Northrop products will maintain a fine safety record, as well as demonstrate an efficient integration of man and machine.

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

HUMAN ENGINEERING considerations have been broadened in Airframe and Mechanical Design department of Northrop Engineering, under direction of Jim Crawford, standing in foreground. Subject of discussion shown—cockpit design. Ray Tenhoff, pilot; Earl Eckerson (above), general supervisor, Human Engineering and Equipment Design; Dr. Jerry Rabideau, human factors specialist, are others shown.

Air Force Flight Chief

CAPTAIN JIM ANTHONY is new chief, Flight Test and Acceptance, for Air Force at Northrop-Palmdale. He replaces Captain Whitehead, following latter's transfer to Hill AFB in Utah. Anthony accepts all Northrop F-89 Scorpions for the service, flying each personally. Riding with Jim during final buy-out is Captain Gil Mazingo, radar operator (not shown). The Anthonys—including wife Fern; children Nancy, 13; Gary, 10; and Sally, 6—have home in Lancaster.

Newest Safety Recognition To Three Northrop Plants

High safety awards came to three Northrop facilities — Anaheim, Los Angeles International Airport, and Hawthorne — last Wednesday night at the Ambassador Hotel as part of the Southern California Safety Congress activities.

Top awards were made to the Anaheim division and LAX, with Hawthorne taking a third place plaque.

Anaheim's award was made for a perfect safety record for 1955. At press time it was indicated that a national award was also forthcoming for this performance.

LAX also won recognition for a no-lost-time accidents year. That facility was competing in the aircraft service category.

The awards continue a long string of triumphs in the safety field, extending back several years.

Thirty-One Below - - !

(Continued from Page 1)

expected in precision equipment like the Scorpion, when cold has seeped through every part for hours on end.

But only one of the aircraft balked at all, and a minor parts change on it promptly put it on the flight line next to its fellow '89s.

Twenty-eight aircraft — 25 Scorpions and three T-33s—took off on schedule.

The accomplishment prompted warm praise from Tech Rep Brigham, who wrote:—

"This squadron has accomplished the impossible. The 28-ship fly-by was accomplished with no difficulties . . ."

He had indicated, earlier in the report, a condition which apparently has failed to cool the enthusiasm or dull the efficiency of the airmen and pilots of the 18th.

"There are five bays with doors operating at the alert hangar," Brigham wrote. "When temperature is 40 degrees below zero, the temperature inside hangar is seven degrees above . . ."

His conclusion was a laconic one: — "The impossible is more difficult at these low temperatures."

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 15

Published every other Wednesday by
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
Permission to republish material with credit to the Northrop News will be granted
News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)
SANTA BARBARA & WESTERN AVES., L.A. (1 rider anyplace between Santa Barbara & Western and plant No. 1.) P. F. WALLMAN (5504-21446, Ext. 1424). AX 3-2670. 12-1

(Zone 2)
MANCHESTER & WESTERN, Los Angeles. (Want one rider). EUGENE F. SCHNEIDER (5354-16483, Ext. 1285), PL 1-7230. 12-2

(Zone 5)
SOUTH & BELLFLOWER, Lakewood. (Room for 3 riders in area of South and Bellflower streets). EDITH MANTEUFEL (5224-15483, Ext. 1259), TO 6-2553. 12-5

(Zone 9)
MANHATTAN BEACH BLVD. OR AVIATION & INGLEWOOD BLVD., North Redondo Beach. HAZEL LAUMAN (5502-18056 Ext. 2741). FR 4-5852. 12-9

7:30 a.m. — 4:15 p.m.

(Zone 2)
EASTERN & VALLEY BLVDS., Los Angeles 32. (Will pick-up anywhere or between Santa Barbara and Figueroa, Hoover, Vermont Sts.) M. A. ROJAS, JR. (5940-24995, Ext. 2661). CA 2-4362. 13-2

(Zone 9)
PALOS VERDES DRIVE WEST & CORONEL, Palos Verdes Estates. (Pass Plaza to Hawthorne Blvd. Capacity five total). R. S. WATSON (3467-43676, Ext. 426), FR 5-7564. 13-9

(Zone 10)
HERMOSA AVE. & 19TH, Hermosa Beach. (Via Gould Lane, Redondo Beach Blvd. & Prairie Ave.). R. E. BOWMAN (4240-31320, Ext. 1985), FR 2-1236. 13-10

4:45 p.m. — 1:15 a.m.

(Zone 9)
INGLEWOOD AVE. & 182ND ST., Torrance. J. GILMER (5235-43649, Ext. 2002). FR 9-8775. 18-9

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 4)
LONG BEACH & INDIANA AVE., South Gate. G. D. SANDBERG (5502-18039, Ext. 2741), LO 9-1500. 2-4

(Zone 7)
VERMONT & 228TH (Ocean), Torrance. BARBARA PENKE (3410-27944. Ext. 445, 742), FA 8-1628. 2-7

CRENSHAW & W. 139TH ST., Hawthorne. SHIRLEY FULLER (5352-38372, Ext. 1453), OS 5-8251. 2-7

(Zone 13)
SEPULVEDA & SHERMAN WAY, Reseda. ROBERT H. IDLEMAN (5353-38474, Ext. 1953). 2-13

HAWTHORNE & CENTURY, Inglewood. RUTH DE CICCA (5351-36186, Ext. 541). 2-13

GRACE & LOCUST, Inglewood. NOLA McCANDLESS (1422-14471, Ext. 689). OR 7-3523. 2-13

WASHINGTON BLVD. & HIGUERA ST., Culver City. CLARA McKELLAR (5621-23923, Ext. 2649). VE 8-6289. 2-13

7:30 a.m. — 4:15 p.m.

(Zone 1)
CRENSHAW & CENTURY, Inglewood. AGNES KUNHART (8100-43858, Ext. 2771). 3-1

(Zone 2)
FLORENCE & WESTERN, Los Angeles. PAT DONNECKER (3120-43621, Ext. 2098). PL 1-5265. 3-2

VERMONT & 80TH ST., Los Angeles 44. VIOLET GALIOTO (5240-36585, Ext. 2667, 2668, 2669). PL 2-5732. 3-2

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 5)
BELLFLOWER & CARSON, Lakewood (8). GEO. F. HERSEY (5142-31486, Ext. 713), GA 9-8583. 3-5

SPRING & BELLFLOWER, Long Beach. (Route: Willow or Spring to Wardlow to Del Amo to Wilmington to Artesia to Crenshaw to plant. Car pool considered). JESSE R. RUBALCABA (5530-43072, Ext. 1541), HEmlock 4-5658. 3-5

EL SEGUNDO & BUDLONG, Gardena. (Ride to work only.) JULIET E. CARUSO, (8310-27408, Ext. 2402). FAculty 1-0543. 3-5

(Zone 8)
CRENSHAW & 174TH, No. Torrance. JOYCE RANZENBERGER (3880-12500 Ext. 1230). DA 9-6118. 3-8

(Zone 9)
PALOS VERDES DRIVE WEST & CORONEL, Palos Verdes Estates. (Pass Plaza to Hawthorne Blvd. Capacity five total). R. S. WATSON (3467-43676, Ext. 426), FR 5-7564. 3-9

(Zone 11)
IMPERIAL HIGHWAY & MAIN or Eucalyptus Drive, El Segundo. VIOLA SMART (3142-40426, Ext. 2022, 2021), PL 4-7704 (message). 3-11

GRAND & VIRGINIA, El Segundo. CAROL SIMONEK (9320 - 38960. Ext. 2151), EA 2-1540. 3-11

(Zone 12)
CENTURY & FREEMAN AVE. or Hawthorne, Los Angeles. JEAN ECONOMAKOS (1421-12207, Ext. 691), OR 1-4361. 3-12

7:30 a.m. — 5:15 p.m.

(Zone 13)
CENTINELA & LA BREA, Inglewood. ROBERT V. NOBL (5261-37331, Ext. 1468) OR 8-9325. 3-13

3:45 p.m. — 12:15 a.m.

(Zone 4)
PEACH & CEDAR, Lynwood. ROBT. HAMILTON (5161-43078, Ext. 1821, 548), NE 1-2556. 6-4

(Zone 7)
WESTERN & 166TH, Gardena. LOIS HERMAN (5353-35969, Ext. 2051). 6-7

(Zone 8)
TORRANCE BLVD. & SARTORI, Torrance. KEITH MILLS (5223-43546, Ext. 563). 6-8

(Zone 12)
IMPERIAL HWY. & DOTY, Inglewood. CARROLL E. TERRY (5501-43077, Ext. 2200). 6-12

(Zone 14)
CENTINELA OR HYDE PARK, Inglewood. PEARL FOWLER (5223-77, Ext. 563), OR 1-2932. 6-14

4:45 p.m. — 1:15 a.m.

(Zone 5)
ROSECRANS & LONG BEACH BLVD., Lynwood. (West of Sears 2 blocks.) CLARENCE FORMANECK (5353-18615, Ext. 1385), NE 1-7508. 8-5

(Zone 8)
TORRANCE AVE. & VALERIE ST., Torrance. (Valerie & Torrance Ave. or Torrance & Hawthorne Ave.) M. E. MILLSAP (5503-42579, Ext. 1385).

CRENSHAW & 174TH, Torrance. MARY E. BLOYE (5241-15769, Ext. 2203-2204), DA 4-5483. 8-8

(Zone 10)
MANHATTAN BEACH BLVD. & SEPULVEDA. Manhattan Beach. ROY C. LEHMAN (5162-43888, Ext. 1821-1996). 8-10

Miscellaneous—Split Shift

(Zone 2)
BROADWAY & HANCOCK, East Los Angeles. (Hours: 5:15 p.m. to 1:45 a.m.). O. L. MAXON (9350-29714, Ext 1810), CA 5-8628 10-2

Sled Study Go-Ahead Received

A letter of intent from Hughes Aircraft has authorized Northrop to go ahead with the first phase of a confidential study involving use of the deceleration sled.

Announcement of the receipt of the go-ahead signal was made by Russ Bowditch, manager of Sub-contract Relations.

Important defense nature of the study has resulted in classification of the details, he added.

Sub-contract Relations is currently seeking contracts of subcontract nature to maintain an even work load when F-89 contracts phase out.

Suggestions Plan Forms With Clerks

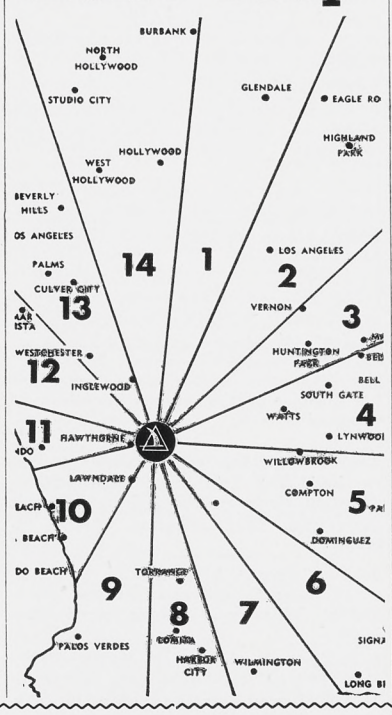
Idea-minded Norcrafters will have an even easier opportunity to jot down their award-winning suggestions as a result of the recent distribution of Suggestion Award blanks to department clerks.

About 30 strategically-placed boxes hold supplies of the blanks now. Those being distributed to clerks are in addition to that source of supply, and are available should the box supplies run out.

The present boxes are situated along main mail routes in the plants to assure fastest possible delivery to Suggestion Award offices in Plant Two. An average of close to 300 suggestions were turned in monthly last year by this method, Suggestion Award Supervisor Cecil Callaway reported.

Any areas lacking the suggestion forms will be supplied by Suggestion Award upon request, Callaway said.

Zone Map



COLLINS REPORTS HALF-YEAR SALES

COMPANY MAINTAINS DELIVERIES

Deliveries by Northrop were well maintained during the first half of the current fiscal year, although earnings declined from last year's record levels, President Whitley C. Collins reported yesterday to shareholders.

Consolidated sales and other income for the six months ended January 31, 1956, amounted to $140,243,928, compared with $145,506,426 for the six months ended January 31, 1955.

Consolidated net income was $3,394,094, or $2.25 per share on the 1,510,824 shares of common stock outstanding on January 31 of this year.

For the same period last year, consolidated net income was $6,601,612, or $4.44 a share on the 1,485,696 shares of common stock then outstanding.

The decline in earnings was expected, Collins said, and was largely due to lower prices on Scorpion F-89 aircraft.

"Our experience and efficiency in production has enabled us to pass on substantial savings to the U.S. government in the form of lower prices, with a resulting decrease in profit," he said.

The consolidated sales backlog of the company on January 31, 1956, was 265 million dollars, compared to 324 million on October 31, 1955, and 366 million on January 31, 1955.

Reporting on the current design competition being held by the Air Force for a new long range interceptor, President Collins said, "An Air Force evaluation team recently assessed our progress, and we feel that our chances are good."

Pay Checks

(Continued from Page 1)

with — and in addition to — vacation checks.

The eligible salaried Norcrafters get 120 hours' leave of absence with pay, usable either as vacation and/or sick leave.

Smooth coordination of Wage and Salary, Payroll, Tabulating, and Personnel department operations brought individual pay entry files up to date by last weekend.

In commenting upon the adjustments, President Collins stated that the increase was "in accordance with the company's long-established policy of providing wages, salaries, and working conditions and other supplemental benefits comparable to those offered elsewhere in the local airframe industry."

MC To Install New Prexy Ralph Hampton April 6

Its tenth president will be installed by the Northrop Management Club on April 6, when Ralph Hampton, Engineering, takes the gavel from outgoing president Scotty Smith at the regular dinner meeting of the organization.

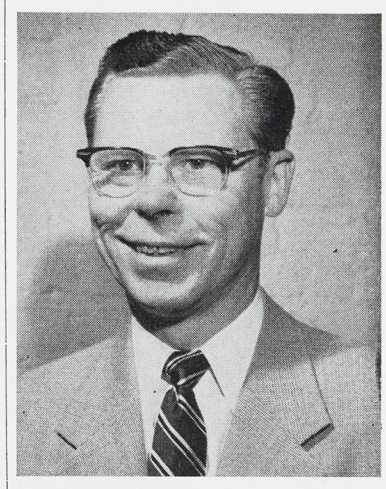
The installation will be held in the Rodger Young Auditorium.

Vice-president John R. Alison, Customer Relations, will be the featured speaker on the Question-Answer session which follows Hampton's inaugural.

The new president will introduce his Board of Control (all pictured below).

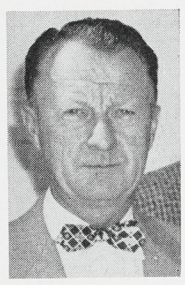
The board includes elected officers John Dew, vice-president; Carl Liedtke, night shift v-p; Bill Fox, secretary; Howard Childers, treasurer; and Les Phipps, sergeant-at-arms. Committee chairmen named: — Ken Davidson, Education; Swede Swearingen, Program; Al Kendall, Facilities; Bob Rust, Finance; Larry Poynter, Tickets; Al Rathbun, Membership; and Harry Herranen, Publicity.

In addition to the inaugural and Vice-president Alison's appearance, the April 6 meeting will include variety entertainment, free raffle, attendance prize, and a top Kal Loeb menu. Deadline for ticket applications is next Wednesday, April 4.



PREXY RALPH

JOHN



CARL

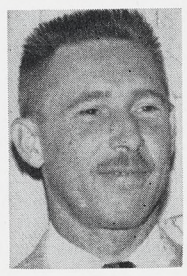
LARRY

KEN

HOWARD

AL K.

BILL



SWEDE

BOB

AL R.

HARRY

LES

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — noon Wednesday one week before publication.

FOR SALE

DINING ROOM SET, 8 pc., $100; 2 silver fox FUR PIECES, cost $500, $100. WARREN NELSON, DA 9-4618. A

SHOE SKATES, women's, size 8, cost $35, skate CASE, both for $15. OS 5-1545 after 4:30 p.m. A

SKIN DIVER'S SUIT, medium. DA 6-6404, after 5 p.m. A

GUN, Remington 721 30-06, Weaver 2.5 scope, mounts, case, $100. DA 6-5227, after 5 p.m. A

SEWING MACHINE, White treadle, $10.50; CHEVROLET pickup, 1947, $330. A. G. JOHNSON, PL 5-2412. A

OXFORDS, ladies', size 8½B, brown, worn once. $5. DA 3-1580. A

DINNER GOWN, peach faille, size 12, worn once, $15; K.&E. Mercury DRAFTING SET (inking), $10. C. A. BROOKS, FR 2-7744. A

CORD, classic 1936, 4-door, new window glass, U-joints, needs some engine work, $300. ROBERT KELSAY. Write to Northrop News, Box 1514. A

TV, 16" Admiral console; SOFA; CHAIR; make offer. C. E. STEVENS, FA 8-5078. A

TABLE SAW, 8", ⅓h.p. motor, homemade, tilting arbor, $38; small PAINT SPRAY OUTFIT, diaphragm type, 1/3 hp. motor, $10; SUN VISOR, fits 1950 De Soto, $3. C. G. CURRY, OS 6-6956. A

GYM SET, two swings, glider, best offer. GEORGE B. LANG, DA 9-4016. A

DOBERMAN, AKC registered, 13 months old, all shots. OR 4-1750 after 6 p.m.

BABEE TENDA, stainless steel, collapsible, $13. JIM CELONI, RE 1-4496. A

TIRES, TUBES and WHEELS, two 800x15, w.w., Ford. A. A. BEYER, OR 7-3922. A

REFRIGERATOR, Coldspot. OS 5-2341. A

PIANO, spinet-type, mahogany finish, in tune, Baldwin, $395. DA 9-7038. A

GAS HEATER, small, $15. FAE ROSER, OR 2-5746. A

IRONER, Apex, full size, used very little. $35. HARPER ROISMAN. FR 4-1690.

REFRIGERATOR, 1955 Frigidaire, 13 cu. ft. $300. R. W. DAVIS, DA 3-2935. A

GUITAR, Gibson L-5, new frets, $250. HO 9-6538. A

BED DIVAN, matching chair, green, 3 mos. old. $150. OR 4-4163, after 5 p.m.

HAIR CLIPPER, electric, $4; G.E. STEAM IRON $5. HAL PARRY, OR 1-9835. A

GUITAR, tenor Martin, like new, $50 including case. V. J. CORSO, OS 5-5193.

BICYCLE, girl's, 20", balloon tires, $17.50. GEO. J. KENNELLY. Write to Northrop News. Box 1509. A

PISTOL, .22 l.r. Colt Huntsman, $38; RECORD CHANGER, VM 4-speed automatic, Model 1200, $30. AL LUTZ, PL 8-2932. A

DRAFTING MACHINE, K&E, like new; BICYCLE, light weight. PL 2-9597. A

RIFLE, 30-30 Winchester, Model 94, lever action, fired once, cleaning kit, carrying kit. $60 takes all. TURK GULSERIAN. OS 5-6449. A

PUPS, Weimaraner, litter registered, $75. EXbrook 4-3429, evenings. A

DRAFTING MACHINE, Bruning, $50. RONALD F. HINZ. Write to Northrop News, Box 1508. A

SPEEDBOAT. 14′ hull, boat trailer, 1950 Ford V-8 engine, $400 or best offer; BUGGY-CAR BED combination, buggy lifts out, frame folds, pad, $15; BATHINETTE, $10. BRASIE T. CASTRO, PL 3-9935. A

RINGS, woman's diamond interlocking bridal set, Artcarved, 13 diamonds, cost $400, $150. BEVERLY BELL, DA 4-8164. A

WIRE RECORDER, Webcor, never used, cost $100. $50. AD 3-2559, before 3:30 p.m. A

SEWING MACHINE, portable, buttonholer, complete set attachments, $75. ELLA L. SANDERS, OS 6-9637. A

INDICATOR, Federal Testmaster, jewelled, .0001, $25. BILL O'BRYAN, DA 4-1800. A

LIONEL TRAIN, 027 gauge, engine, 5 cars, switches, tracks, transformer, $30 or reasonable offer. DON GRAY, FR 4-8784. A

BABY CRIB & mattress, $20; HIGH CHAIR, makes into table, $7.50. E. STECKI, PL 6-1777. A

RUG, Chinese hand hooked wool oval 9′x12′ cost $135, $50 incl. pad. OS 6-4981. A

BEDROOM SUITE, walnut; PLATFORM ROCKER; BOAT, 9′ pram. W. P. MARGRITZ. PL 5-6648. A

SHELTER, mobile, for 4 campers, with icebox. TED KELLY, DU 8-4082. A

TRAVERSE ROD, heavy duty, opens to 23′ w/floor spring, $15. NIKI WILLIAMS. KE 5-8312. Anaheim. A

ELECTRIC SHAVER, custom Schick, used twice, $19.95. RUDOLPH J. LABOSHIN. CL 7-6694. A

REDUCING UNIT, Stauffer, original price $300, $100. DA 4-3676. A

AUTOMATIC WASHER, Kenmore, 1948, $25. G. LIVINGSTONE, OR 1-2375. A

FOR SALE

CLUB CHAIR & ottoman, $30; modern TABLE LAMP, $5; corner 3-tier SHELF, $2; tub style CHAIR, $15. JOSEPH P. KANE, OR 1-1114. A

BICYCLES, girl's, two, 26", one with basket, $15 each. W. S. CONNER, WI 7-5506, Lancaster. A

LAMPS, 2 table, 1 bedroom, 1 ceiling fixture, reasonable. H. B. WATERMAN, WE 5-6824. A

BUICK, 1946 needs work, $50. MYRNA L. WALSH, PL 1-6418. A

STUDEBAKER, 1950 Champion, 4-door. ANN OLIVIERI, FR 4-6013. A

FORD, 1948 coupe, primed, lowered, nosed, twin pipes, $200. N. M. SCHILZ, FR 4-7432. A

CHEVROLET, 1940. $75. M. A. WEIR, DA 4-3878. A

FORD, 1940 2-door sedan, new seat covers, $200. B. V. MORLEY, OS 6-1555. A

BUICK, 1948 Super convertible, new Century V-8 motor, transmission, rear end, $595. PAULINE HIGGINS, PL 9-6985. A

MG, 1951, $900. BARTON L. WADE, NE 5-9851. A

OLDSMOBILE, 1941 2-door sedan, Hydra-Matic, $100. P. T. HICKMAN, PL 4-0832.

PACKARD, 1938, $40. PAUL M. BLASINGAME. Write to Northrop News, Box 1501. A

MERCURY, '50 4-door, overdrive, $425. V. KOLBERG, CR 6-0822, afternoon or evening. A

BUICK, 1948 RM convertible, Dynaflow, $350. PAUL NELSON, AX 4-0231. A

FORD, 1956 convertible, power steering, $2700; APARTMENT HOUSE, 6 unit, 2 yr. old, all apt. newly furnished, $40,000. ROBERT L. BURR, FR 9-6308. A

CHEVROLET, 1950 convertible, $425. E. R. KNOTT, FR 2-4549. A

CHEVROLET, 1940. $100. MARLENE D. BRITTON, FR 4-5948. A

CHEVROLET, 1951 4-door sedan, $650. R. S. COLLINS. PL 4-0797. A

HENRY J, 1953, $250. ETHEL M. POORE. Write to Northrop News, Box 1513. A

HILLMAN MINX, 4-door, 1953, $575. NORMAN DUNTON, LA 5-9325. A

OLDSMOBILE, 1947, 4-door, 98, Hydra-Matic, $150 or offer. ROE MASULLO, CL 6-0963. A

SEWING MACHINE, Singer, model 15-91, used twice, cost $249, $200. JAMES M. BUGBEE, EMpire 3-3597. A

STOVE, Westinghouse, double oven, 1½ years old, $175; Farnsworth, combination RECORD PLAYER and RADIO, blonde, $75. CA 2-2556. A

SUNBEAM ALPINE, 1954, $1495; PONTIAC, 1955 convertible, full power equip., $2750. RUSSELL D. GUY, FR 4-7687. A

REFRIGERATOR, Gibson 11 cu. ft. PL 6-4598. A

FORD, 1956 V-8 station wagon, best offer; Hammond electric ORGAN, cheap, owner leaving town. TE 4-4935, between 8-10 a.m., Mon., Wed., Thurs. only. A

GUN, 300 Savage model 99-EG, never fired. DAVID L. YOUNG, PL 4-6983. A

YACHT, 21′ registered Star class sailing, trailer, sails, spare equipment, best offer over $800. ROBERT H. WILSON, DA 4-3084, after 6:30 p.m. A

FORD, '40 coupe; VENDING MACHINES, stands, bulk penny type. F. W. PEAK, DI 2-5888. A

FORD, '49, convertible, ¾ cam, customized, $250. GARY STURM. Write to Northrop News. Box 1520. A

PIANO, baby grand, Brambach, $350. AGNES E. SNYDER, OR 2-1402. A

PANEL TRUCK, Chevrolet, 1937, $35. J. F. McGRATH, PL 9-7984. A

CHEVROLET, 1950 convertible, $300. R. L. NERONE. VE 8-6617. A

WASHING MACHINE, ABC, wringer-type, $35. RICHARD M. BROWN, LOgan 5-6790. A

PACKARD, 1947 Clipper, 4 door sedan, overdrive, $100. Write to Northrop News. Box 1518. A

HUDSON, 1953. Hornet club coupe, overdrive. D. W. LINDER, AX 3-8028. A

JEEP, 1950, 4-wheel drive, station wagon, $750. FR 5-8872. A

CHRYSLER sedan, $40. Write to Northrop News, Box 1517. A

BED DIVAN, matching CHAIR; 2 END TABLES, 2 COFFEE TABLES (blonde), 2 green LAMPS $60. RUTH LARMOUTH, FR 9-2129, after 5 p.m. A

OLDSMOBILE. 1952, 88 Holiday, 4-door, OR 2-3675, after 4:30 p.m. A

CROSLEY, Hotshot, 1950, $185. OS 6-0675, after 4 p.m. A

STOVE, Sears, $150; rattan BAR, 2 stools, $75; rattan drop leaf TABLE, $35. HELEN GRADICH. OS 6-3759. A

BICYCLE, boy's, 24", $15. R. F. FUNDER, OR 7-8775. A

MILLING MACHINE, Diamond M24T, many attachments, $1200. PL 4-1096. A

FOR SALE

GREASE GUN, Aero, $2; STEERING WHEEL for '55 Buick, $2; auto BUMPER JACK, $1.50; metal FIREWOOD BASKET, $2; silver fox STOLE, $65. BARTON, GR 7-1539. A

IRON, Steam 'N Dry, Universal, still in box, $10. OS 6-6637. A

AUTOMATIC WASHER, Westinghouse Laundromat, $40; cast iron LAUNDRY TUB, porcelain inside, $5; TRICYCLE, $4. F. RICHMOND, OR 2-3648. A

CHEVROLET, '51 Bel Air, $550. OR 7-0809, evenings or weekends. A

MANIFOLD, Offie, 2 pot, w/carbs., and chrome bonnets, $30; Fenton alum. RACING HEADS, 8.5:1, $30, both for '49 Mercury; '49 Plymouth ENGINE and TRANSMISSION, $35. FR 9-4081. A

NASH RAMBLER, convertible, 1951, $550. WALLACE LEFFLINGWELL, OS 6-4034. A

FORD, 1953, convertible, Fordomatic, Continental, $1000. DAVID D. LUCE, FR 5-7290, after 7:00 p.m. A

CAMERA, super "D" Graflex, 3¼x4¼, used few times, $125; STROBE LIGHT, Heiland-Wilcox, 2 heads, charger, $100; ENLARGING EASEL, 4-way adjustment, $7.50. C. W. NEWLAND, OR 7-5925. A

PICK-UP TRUCK, 1939 Ford, 1956 plates, $109, JIM HOPPER, EM 1-2819. A

AUTOMOBILE HEATER, Stewart-Warner, gas, $8.50; GOLF CLUBS, 7 irons, 2 woods, bag, $30. EX 8-0500. A

HIDE-A-BED, Simmons, green, $65 or offer; PLATFORM ROCKER, rose. C. MAHIKOA, OS 5-3274. A

TV, 10" RCA, table model. $20. F. A. VAN SLYKE, OR 1-3552. A

CADILLAC, 1951 De Ville type coupe, Hydra-Matic, $1300, $450 down and finance balance. OS 6-4008, after 5 p.m. A

WHEEL CHAIR, excellent condition, reasonable. F. G. NICOLAY, TE 0-5139. A

CABIN CRUISER, 1955, 21′ Owens, 96 h.p. inboard, sleeps 3, galley, head, complete cover, all Coast Guard required equipment, $3200. AT 9-2696.

FIREPLACE LOGS, ornamental electric, $10. R. A. BALLING, VE 9-7378. A

IRONER, General Electric, portable, used twice. $30. NE 1-4712, after 5 p.m. A

INCINERATOR, used, make offer. G. BALZER, PL 5-3960. A

RELAXICIZOR, portable model, luggage type case, hardly used; RADIO-RECORD CHANGER, Stewart-Warner, walnut console cabinet, $25. B. E. RUNSWICK, OR 7-3514. A

1948 FORD TUDOR, $150. ROCKY BARNUM, DA 6-1382, after 6 p.m, A

OUTBOARD MOTOR, 1955 Evinrude, 7½ hp., quiet, separate gas tank, $185. OR 7-3614. A

CHAIR, tiltback, with ottoman, red, black fleck, $15. A. WHITTEMORE, OR 4-2785.

REFRIGERATOR, 1940 Coldspot, $45. H. W. ALLEN, OS 6-8842, after 6:00 p.m.

SECTIONAL, 2 piece, and MATCHING CHAIR, $10. PL 6-7337. A

REFRIGERATOR, Coolerator. OS 6-8250.

CHEVROLET, 1939, 4-door, $50. V. J. DeBELL, PL 3-0019. A

CHEVROLET, 1938, $60. E. C. STRUBLE, DA 9-2047. A

TRAILER HITCH for '50 Chev, $5; OVERLOAD SPRINGS for '50 Chev, $5; WINDSHIELD for Cushman scooter, $3. R. N. SHERWOOD. Write to Northrop News, Box 1528.

AFRICAN VIOLETS, several varieties, 50c each. J. J. YATES, PL 4-2726. A

FORD, 1950 Crestliner, overdrive, $550. ROBERT L. JENSEN, TO 9-6100. A

DINING ROOM SET, table, 6 chairs, buffet, $50. HERB BLADEL, OS 6-3081. A

BOAT, 16′ outboard cabin cruiser, motor, trailer, accessories. L. H. O'DONNELL, FR 9-7446. A

FORD, 1947 club coupe, $225. G. S. NOSACKA, TO 4-7673, after 6 p.m. A

BABY CRIB & MATTRESS, $15; PLAY PEN, $3; Army BUNK BED, springs (2), $5. PL 6-8954. A

FORD, '47 convertible coupe, best offer over $250. S. L. PETERSON, PL 6-8095. A

BOATS, 15′ inboard speed, V-8 engine, launching trailer included, $600; 20′ Bay City cabin cruiser, sleeps two, 100 hp. Chrysler engine, bottom fiberglassed, reasonable offer. R. C. MALSOM, PL 8-9182. A

BABY BUGGY, Hartman, collapses, makes car bed, $10. CHANE A. HENDERSON. Write to Northrop News, Box 1526. A

BEDROOM SET, complete, $100. FR 9-9952. A

BOAT, Colorado River special, 6′ beam x 16′ length, sell for storage costs, $12.99. Write to Northrop News, Box 1529. A

PHEASANT, 7 birds, 2′x3′x6′, BROODER, 6′x6′x21′, all metal PEN, $25; JIG SAW, 18" Craftsman, electric motor; ¼ inch electric DRILL MOTOR, 5" disc, oscillating sander attachments, $30. NE 2-7610. A

STOVE, Gaffers and Sattler, table top, cream color, $25; Union power SEWING MACHINE, $100; child's LULLABY WARDROBE, five drawers on side, honey birch, $25. OR 1-8901. A

STUDEBAKER ¾ ton pickup truck, 1947, new motor, tires; CHRYSLER coupe 1941, extra tires; CHICKENS, variety Banties, Red Cornish, R.I. Reds or Silver Spangled Hamburgs; PHEASANTS, selling out; toy fox terrier PUPPIES, also grown stock. DA 9-3936, evenings, week ends. A

FOR SALE

BICYCLE, English, 3-speed, men's style, $20. STEPHEN STEIN, OR 4-0203, between 6-6:30 p.m. A

BOAT and MOTOR, guaranteed. FR 4-2190, after 4:15 p.m. A

CONTOUR CHAIR, Birk-Loc, green plastic. OS 5-7993. A

MOVIE OUTFIT, 16mm sound, silent; STEREO OUTFIT, reasonable; portable RECORD PLAYER & WIRE RECORDER. DENVER HOWARD, OS 5-5829. A

SILVERWARE, quadruple plated, service 8 (62 pcs.), $40 or best offer. FR 5-9885, eves and weekends. A

CHEVROLET, 1951 station wagon, Power Glide, new engine, $795 or offer. FR 4-5139. A

FORD, 1954, 8, Fordomatic, Tudor custom. FR 5-9885 evenings or weekends. A

BUICK, 1947 2-door, standard shift, $125. R. H. BENTON, TO 7-7593. A

FORD Model "A" 1930, offers accepted; FRIGIDAIRE, self-defrosting, 11 cubic ft.; BED DIVAN and CHAIR, wrought iron legs, TABLES to match; FRUIT JARS, 50c dozen. DA 9-6765. A

RIP SAW, 14" steel table, $10. FR 2-5944. A

WANTED TO BUY

MG—TD, never raced, less than $1000. ALBERT NADEL. EX 6-2151. B

CLOTHES LINE POLES, one set of two, used, pipe or steel. ROBERT HAMILTON, NE 1-2556. B

HOME WORKSHOP, used DeWalt, recent model, ¾ h.p. only. J. L. THURMOND, AX 1-0483 (message). B

FORD, 1952 station wagon, V-8, mechanical shift. FR 9-9629, after 5 p.m. B

MAGAZINES, Model Airplane News, Air Trails, Flying Models, only uncut copies, good condition wanted, 1940 to present; also other items pertaining to World War I and model aircraft. R. T. HOOD, OS 5-5229. B

SPORTSMAN TOP for Chevrolet pickup, cheap. J. A. CABLE, FR 2-0149. B

AUTOMOBILE, sedan, Hydra-Matic, radio, heater, postwar, give up to $200. RAY BOARMAN, PL 5-0863. B

ADDING MACHINE, small late model, Addo-X or R. C. Allen, must be like new, also consider CASH REGISTER for service station. PL 5-6610. B

RUBBER LIFE RAFT and/or equipment, any condition. TO 7-8270. B

AUTOMOBILE, prefer smaller car, around '51 or '52, $350-$450. JIM PIECHOCKI. Write to Northrop News. Box 1516. B

BICYCLE, girl's, 26". good condition. ALICE INGRAM, DA 6-3373. B

SEWING MACHINE, reasonable. PL 4-6865, evenings. B

FOR TRADE

TRUCK, trade 1948 Dodge ¾-ton pickup, for ½-ton pickup truck or Jeep in good condition. PAUL KOERSCHGEN, DA 9-1930. C

PONTIAC, 1955, 2-door, trade for lighter car, prefer '55 or '56 Ford V-8. C. W. NEWLAND, OR 7-5925. C

FORD, 1955 Victoria, trade equity for '49 or '50 Ford or Chevrolet. JOANNE ROOK. Write to Northrop News, Box 1515. C

FOR SALE OR TRADE

CHEVROLET, 1956 Bel-Air sport coupe, V-8, fully power equipped, will take '51 or better car for equity. JOHN WETTSTEIN. OS 5-1078. M

FORD, 1942 deluxe, $85 or what have you. KEN BUSCHE, OR 8-7318. M

BEAGLE, A.K.C. registered, female, $100. DOROTHEA SIMPSON, EA 2-4512. M

PINTO, 5½ years old, (have good saddle for sale with horse), trade for milk cow. Write to Northrop News, Box 1505.

OSCILLOSCOPE, Heathkit, Model 09, low capacity, demodulating probes; two 7:60x15 TIRES, make offer. OS 5-8890 after 6 p.m. M

RADIO-HI FI, RCA model 211K, floor cabinet, want rifle any cal. or electric motor, ¾ h.p., low speed. A. FERNANDEZ, AN 3-7620. M

SKIIS, pair Northland, laminated skiis and poles, trade for pair water skiis. R. A. COUVILLION, OR 8-3357. M

REFRIGERATOR, Hotpoint, 7 cubic foot. PL 9-5719. M

OLDSMOBILE, 1938 4-door, $80 or trade for tools; television combination, wedding rings, 8mm movie, cowboy or skiing equipment. HENRY, RE 4-4600. M

DODGE, 1948, $150. W. T. FERRIS, PL PL 5-4114. M

FORD, '49, '51 Merc. engine, overdrive, $375, or trade for cycle. PHIL STEED, PL 2-3095. M

WASHER AND DRYER, deluxe, Westinghouse, $300 or trade for car or small house trailer of equal value; BUICK, 1939, '56, $30. VELLA GIBSON. Write to Northrop News, Box 1521. M

MANGLE, large Hotpoint, knee, finger control, $125 or trade for 21" TV console. CHANE A. HENDERSON. Write to Northrop News. Box 1527. M

CHAIN FALLS, 1 ton Yale screw geared, extra long chain, sell or trade for typewriter, hyd. floor jack or what have you? R. STRAUGHN, DA 4-7358. M

FREE (To be given away)

KITTENS, 2, young, housebroken, must go as pair. Write to Northrop News, Box 1503. D

FRUIT JARS, several dozen. CLARA McKELLAR, VE 8-6289. D

PARAKEET, light gray, housebroken. TE 4-4935, between 8-10 a.m., Mon., Wed., Thurs. only. D

RENTALS OFFERED

ROOM for 2, private entrance and bath, new home, gentlemen preferred. GEORGE B. LANG, DA 9-4016. E

HOUSE, unfurnished, 2-bedroom, redecorated, adults or child over 12 years only, $85 month. EUGENE MASTERSON, PL 6-5465. E

HOUSE, one bedroom, furnished, water and lights paid, children O.K., $65 month. ANDREW S. KERNES, OS 5-5762.

APARTMENT, new, 1 bedroom, unfurnished, garage, near Century & Crenshaw, $77.50. EX 6-6823, EX 9-5587. E

APARTMENT, new, 1 bedrm., garbage disposal, garage. VIOLET RHOADS, OR 7-3866. E

RENTALS OFFERED

SHARE APARTMENT, one or two young men to share studio apartment, Hermosa Beach, 3 blocks from ocean, garage available, $50-$75 month. RAY HINKLEY, AX 3-3662. E

APARTMENT, 1 bedroom, upper, furnished, close to Manhattan Beach business center, sun deck, garage. FR 5-4118. E

BEACH HOME, nicely furnished, 2-bedroom, knotty pine throughout, ½ block from beach, Hermosa, fenced, patio, $90 mo. OS 6-2515. E

SINGLE APARTMENT, unfurnished, w/w carpeting, thermostat heat, $49.50. A. DELORME, EX 4-8559. E

ROOM (woman), home privilege, 2½ blocks from Plant One, day shift. EUNICE DuBRY. OS 6-6433. E

APARTMENT, three-room, unfurnished, garage, close to shopping, bus line, available April 11, $67.50. CLARA HOLECHECK, OS 6-7953. E

GARAGE APT., furnished, single, near Northrop, private bath, refrigerator, utilities paid, man on night shift preferred, $10 week. GRACE McCORMICK, OS 5-3985 between 11 & 4 p.m. E

SLEEPING ROOMS, near Northrop, $8, $9 week. W. ASTLEY, OS 5-5850. E

SLEEPING ROOMS, two, clean, quiet, corner 176th & Prairie. FR 4-2108. E

FURNISHED APARTMENT, private entrance and bath, available April 1, vicinity Aviation and Manhattan Beach Blvds. FR 4-1932 after 4 p.m. E

ROOM, man, one bed in two-bed room, other bed occupied by Northrop employee, $7 week. OS 6-9567. E

DUPLEX, two bedroom unfurnished, April 1, $85 month, water paid. LOUISE WARREN, OR 2-0321. E

SHARE APARTMENT, girl, in Leimert Park, will furnish transportation to and from Northrop. EVELYN PRESCOTT. Write to Northrop News, Box 1525. E

RENTALS WANTED

APARTMENT, furnished, 2 adults, not over $65, near Northrop. MRS. ROBERT A. RENIER. Write to Northrop News, Box 1507. F

HOUSE, 2 bedroom, furnished or unfurnished, allow children, prefer fenced yard, reasonable, will lease. BESS PHILLIPS, EA 2-3440. F

HOUSE, 3-4 bedroom, fenced yard, four children, 1 cat, 1 dog, will sign lease, prefer vicinity Hermosa Beach, Redondo Beach, etc., references if required, will pay to $125 month, need by April 1. R. M. CHANDLER. Write to Northrop News, Box 1519. F

APARTMENT, 1 bedroom, for one, furnished or unfurnished, utilities paid, $50 or $55 month, Inglewood, Hawthorne or near. J. W. LOPEZ, DU 8-4807. F

CHILD CARE OFFERED

CHILD CARE, licensed home, 3 years and up, near school, fenced yard. NELSON THOMAS, TE 4-3689. G

CHILD CARE, ex-nurse, care for one or two children any age, will consider rooming PL 8-9436. G

CHILD CARE, daytime, rates for more than one child, any age, loving care, $10 per week per child. DA 3-1869. G

CHILD CARE, day or night, licensed, close to school, play yard, hot lunches, naps if desired. OS 6-6566. G

CHILD CARE, ages 3 to 10 yrs., lawn play yard, fenced, near school, day or night shift, hot lunches, naps, snacks, birthday parties. OS 5-7993. G

CHILD CARE WANTED

CHILD CARE, woman to care for my two pre-school boys during day w/light housework, board, room and small salary. OS 5-1545 after 4:30 p.m. H

LOST

BIBLE, leather bound, left in discarded cabinet by mistake. PL 2-3095. J

SPORTS

The Northrop News

CITY CHAMPS—. Class E division winners in Women's Bowling Association all-city tourney are pictured, left: Gwen Brewer, Winnie Smith, Lil Dotson, Patti Clifton, Gloria Hofius. NRC sponsored nine teams — 140 teams competed for top pin spots in tournament.

To the Winners

ALSO WINNERS in LAWBA contest in Class F division were, left: Commissioner Lee Hopkins, Millie Hartman, Dorothy Lowe, Dorothy Walls, Clara Holecheck, Evelyn Kmieciak. See story, p. 1.

TROUT FISHERMEN GATHER NO DUST

Blessed is the trout fisherman, for he may fish all year around.

At least he may do so in several Southern California counties, according to a recent decision by the Fish and Game Commission. The chosen counties include Santa Barbara, Ventura, Los Angeles, San Bernardino, Orange, Riverside, San Diego, and Imperial.

The year-around season opens on April 28 — except for San Diego county, which starts March 31.

Another regulation adopted by the Department of Fish and Game is the establishment of a 1956 state-wide trout bag limit of 15 fish.

In order to insure adequate fishing for all sportsmen, the DFG has allotted over a million rainbow trout averaging 7½ inches or more in length for planting in 94 Southern California streams and lakes.

The following Los Angeles County streams are scheduled to be stocked: Arroyo Seco Creek, Lower — fish up 3 miles from Coon Canyon Bridge; Arroyo Seco Creek, Upper — fish from U. S. Forest Camp down to Switzer's; Big Rock Creek—fish up from Angeles Forest boundary.

Big Tujunga Creek, Lower — stocked vicinity of Big Tujunga Guard station; Big Tujunga Creek, Upper — fish vicinity Wickiup Camp; Bouquet Canyon Creek — road parallels stream northeast of Saugus.

Cattle Canyon Creek; Crystal Lake; Elizabeth Lake Canyon Creek — planted section vicinity of Cottonwood Public Camp; Fish Canyon Creek — 4 mile hike from Morris Dam; Jackson Lake; Little Rock Creek—above Little Rock Reservoir southeast of Palmdale; Little Rock Reservoir.

Roberts Canyon Creek—2 mile hike in from Morris Dam; San Antonio Creek — planted from Camp Baldy down to Camp Four; San Dimas Reservoir; San Gabriel River East, North, West and Prairie Forks.

Leagues Clash in Hoop Final --Snarks Win

League giants battled last week for hoopster supremacy in NRC circles and the Snark league's 5503 tilted the Scorpion El Segundo 4130 boys twice in a row to cop the playoff.

The Scorpion league players dropped the first game with a 38-29 tally and then lost again after a valiant 44 to 39 point battle.

High scorers listed at the end of league play were: Dean Richardson—Scorpions; Dan Parker—Snarks.

The Snarks named Ernest Stafford as their most valuable player and the Scorpions gave their nod to Frank Holmes.

Not to be outdone, Snark league players on the night shift roster clashed with the Department 5437 89'ers for the after-dark league trophy and emerged victorious.

All players received individual trophies from NRC.

ANGELS TO PLAY EARLY FOR FANS

"Play Ball!" will sound at 1:30 daily for Los Angeles Angels games this season, partly because night shift Norcrafters wrote and asked for earlier starting time.

"After we announced that we would return to daytime baseball," Angels President John Holland wrote to Jack Callahan, Manufacturing Control, "letters such as yours influenced our decision to start the games at 1:30."

The letters had pointed out that later starting time would make it difficult for night shift fans to see the games to the end, and still report to work on time.

NEW DEAL—. Effective this issue the Good Time Table will appear monthly with advance listings of meeting dates and special club news. This issue announces April events. May dates will appear in April 25 issue of News.

Merry Mixup Called Draw in SC Rally

By HAL HUNSBERGER
President
Northrop Recreation Club

It was just one of those days. Twenty-nine hot little sports cars roared away at the start of the March Hare and Hound Sports Car club rally—and five cool little cars finally sputtered across the finish line. Confusion reigned and while everyone was wondering "wha' happened?" judges decided to call it "no-contest" and set a re-run for April.

The date set for the re-run (called the April Rabbit and Dog rally this time) will be April 8, starting at the El Segundo facility parking lot — Mariposa street entrance. First car will receive the starting flag at 9:00 a.m.

★ ★ ★

Word is that all NRC Softball team managers are to meet next week to formulate plans for the forthcoming NRC softball season which opens April 30.

Day shift managers are called for April 2, Monday, at 7:00 p.m. in the NRC Clubhouse.

Night shift heads are to gather on Tuesday, April 3, at 1:00 p.m. in the Clubhouse.

NRC Good Time Table for April

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784; or Crenshaw Industrial Relations office, 2738.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in Annex every Thursday evening, 7:00 to 10:00 p.m. Life class—models furnished. Planned weekend land and sea scape painting parties for the entire family.

BIBLE STUDY
Meet daily, Plant 1, east mezzanine conference room, 11:15 a.m.; Plant 11, M.W.F. 12:00 conference room MI-B1, T. Th. 12:30, conference room MI-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ed Freitas
Meet 1st Wednesday of month, 7:30. Election of officers at April 4 meeting. "4th Annual Anchor Drag" in the Annex Saturday, April 28, 9:00 p.m. Music by "Ron Webb's Quintet." Admission: $1.25 per person. Night shift members meet 1st Thursday following day shift meeting, 2:30 p.m.

BOWLING (days), Wayne Chamberlin
BOWLING (nights) Garland Steiner
Fourth annual spring bowling tournament April 21-22 and 28-29. Entry blanks now available in PA office. Tournament at Windsor Bowl. Summer Leagues now forming.

BRIDGE CLUB,
Meet 2nd and 4th Tuesday of month, 7:30 p.m. Election meting on April 24.

CAMERA CLUB (days) Howard Linnenkohl
Meet in Annex 1st and 3rd Friday of month, 7:30 p.m. Next: April 6. Dark room facilities available to all members.

CAMERA CLUB (nights), Gene Beck
Meet in Annex 1st and 3rd Saturday of month. Next: April 7, 7:30 p.m. Dark room facilities available to all members.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30 p.m. Next—April 18.

FISHING (day and night)
Register all fish for NRC awards with cards supplied by Personnel Activities office.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next—April 25.

GOLF, Andy Titus
GOLF (nights), Pete Lower
Summer leagues now forming. Tournament Fox Hills April 29. Entries now open.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m.

MIXED CHORUS, Florence Graveline
Meet every Tuesday evening, 7:30 p.m. Easter program at NRC Clubhouse, Friday, March 30, 8:00 p.m. Everyone invited.

MODEL CRAFT CLUB, William Feldt
Meet first Monday of month, 7:30 p.m. Next—April 2.

PHILATELIC CLUB, George Borton
Combined philatelic and numismatic meets 2nd and 4th Mondays. 7:30 p.m. Juniors welcome.

RADIO CLUB, Paul Serafin
Meet last Thursday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland. Pot Luck dinner at Clubhouse April 11, 6:00 p.m.

SKATING CLUB (nights), LeRoy Dick
Roller Skating every Sunday evening, 7.30 p.m., Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next—March 31.

SKIN DIVING (days) George Branch
Meet 3rd Monday of month, 7:30 p.m. Next—April 16.

SKIN DIVING (nights) Bob Larson
Meet 3rd Wednesday of month, 1:00 p.m. Next—April 18.

SOFTBALL (days) Dave Heaps
Teams now forming for summer leagues. Practice sessions begin Monday, April 30. Leagues to play Monday and Wednesday at Rosecrans Playground; Tueesday and Thursday at St. Andrews Playground.

SOFTBALL (nights) Dave Carney
Teams now forming for Summer Leagues. Practice sessions to begin Monday, April 30, 10:00 a.m. Games to be played at Rosecrans Playground.

SPORT CAR CLUB, Gayle York
Meet 2nd Thursday of month, 7:30. Next meeting April 12. Election of officers. Rally Sunday, April 8. On Sunday, April 15, El Camino College Parking Area, N.R.C. hosting Gymkhana open to Southern California Sport Car Club Council members only. Prizes and awards. Snack Mobiles for your convenience. Spectators welcome.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING (days), Jack White
Meet 7:30 p.m., 1st Tuesday of month. Next—April 3. Movies and talk on recent trip to Southern California Gulf by Bob Ketcham.

TOASTMASTERS 213 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo"—Imperial and Hawthorne.

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd., just north of Manchester.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Election of commissioner at next meeting, April 24.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins
Summer leagues now forming. Women's trio hdcp. league to bowl Thursday evening, 6:15 p.m. at Inglewood Bowl. 4th Annual Spring Tournament—April 21-22 and 28-29, Windsor Bowl

INTERIOR DECORATING
Classes meet every Thursday evening, 7:30 p.m. Instructress furnished. Lamp shade class now in progress.

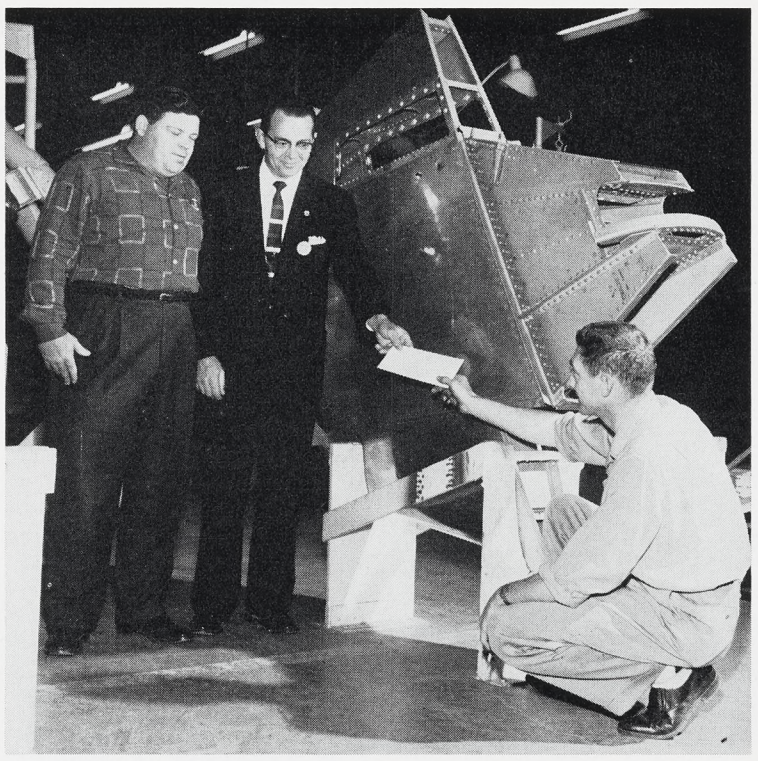
KNITTING, Thelma Martin
Meet every Monday evening, 7:30 p.m. Craft Room, NRC Clubhouse. Beginners instructed free of charge. Refreshments.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet every Tuesday, 7:30 p.m. Scout Cabin, 135 Grevillea Avenue, Hawthorne Saturday, April 21, "Beachcombers Ball" open to all teenagers. "Skip Chiodo" and his band.

TOASTMISTRESS, Hettie Horner
Meet in NRC Clubhouse Board Room 1st and 3rd Thursday evenings for dinner meetings, 7:00 p.m. Call Personnel Activities office for reservations.

PHOTO FEATURE:

Northrop News Pictorial

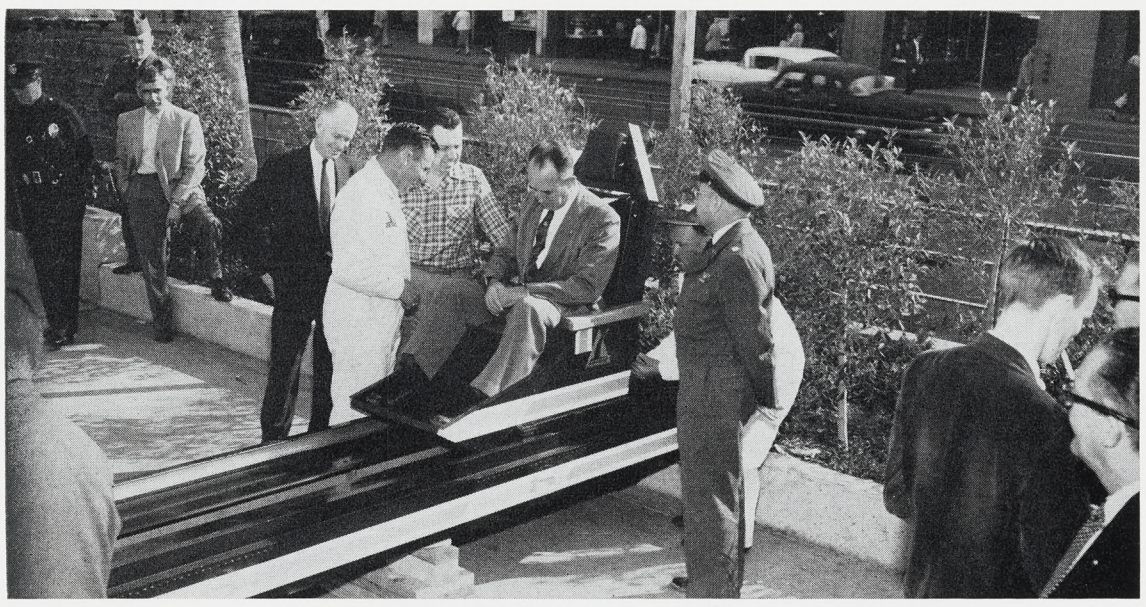


ONTARIO NORCRAFTER Donald D. Wranosky hit Suggestion Award jackpot for $230 recently when his idea for a cradle jig for lower vertical stabilizer assembly was adopted. Bob Snider, Ontario manager of Industrial Relations, is shown presenting check to Wranosky, with Ray Cleveland, foreman, looking on.

$$ Jackpot

Salts Salt Sea Safety Sell Sane Sailing

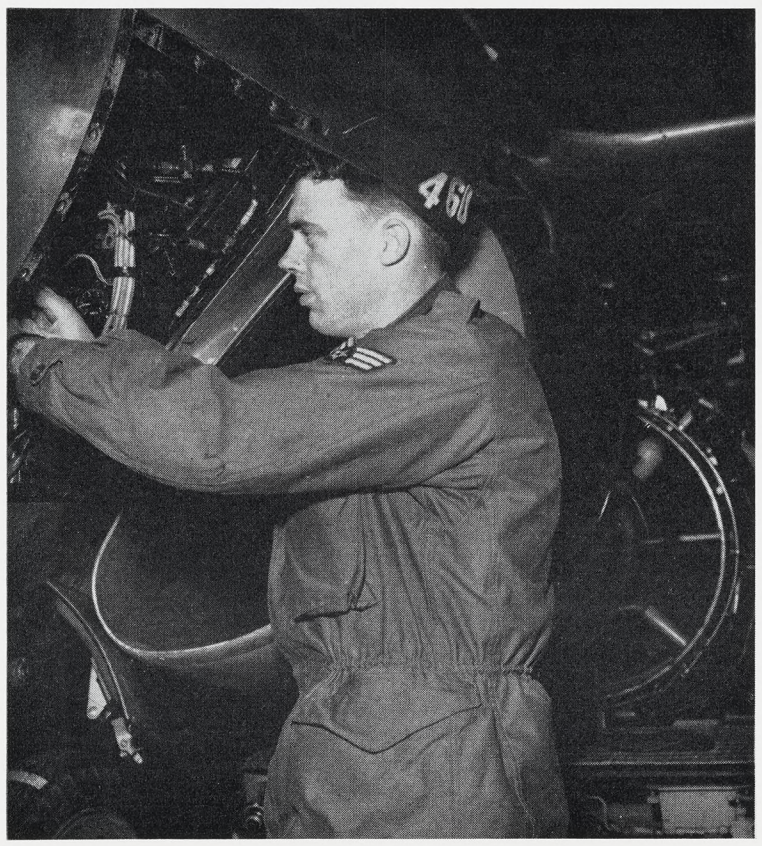
SAFETY AT SEA—. Recent luncheon meet featured plans for new NRC Boat Club safety training program. Pictured, left: Ed Freitas, Boat Club commodore; Elmer Chiodo and Harold Senter, both BC rear commodores; Earl Markham, training officer, Coast Guard Auxiliary Division 22; Lt. Cmdr. Kenneth Bilderbeck, U.S. Coast Guard; John Neerhout, rear commodore, Coast Guard Auxiliary. Chief Safety Engineer Lee Johnson is coordinating. Classes are held weekly.



CONTACT—! Los Angeles Police Chief William H. Parker tests safety belt on Northrop sled model recently displayed in Pershing Square. Lieutenant Colonel John Stapp (in uniform), Aero-medical Laboratories—USAF Air Research and Development Command, who has ridden Northrop sleds to 632 mph, stands watchfully at right. Norcrafters checking out the Chief are: left in white coveralls, Julian Torbett; George Nichols, open collar; and Jake Superata. Out of photo—Gordon Nelson. Sled on display is 11-foot replica—operates via shock cords. Demonstration of sled and other military equipment was jointly sponsored by Downtown Business Men's Association, and Los Angeles Chamber of Commerce. Northrop Public Relationsman "Hop" Hopkins is at extreme right.

Airman for January

AIRMAN OF THE MONTH for January—. Airman First Class Robert C. Quain, 460th Fighter Interceptor Squadron, Portland, Oregon, has been selected by ADC headquarters as first top man in 1956 for Scorpion maintenance ability. Aggressiveness, extra hours without complaint, skill in training new airmen all helped win coveted honor. Trip to Rose Bowl might be waiting. Monthly winners vie for honor.



Minneapolis Sky Pilots in Cockpit Tour

MINISTERS OF MINNEAPOLIS—. The Protestant Minneapolis Ministerial Association viewed Scorpions of 432nd Fighter - Interceptor squadron, Wold-Chamberlain Field. Invited to base by chaplains Majors Ellis Veatch and Ransom B. Woods and Captain Kenneth Hamstra, the visiting sky-pilots had ham and egg breakfast, a business meeting, Scorpion cockpit tour, demonstration of jet pilot flight gear and pressure suit, plus briefing on '89's defense role. Photo shows Lieutenant Bob Sonnett, Base Information Services officer, answering churchly jet aircraft queries of visiting ministers.

USAF UNVEILS SNARK—!

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, April 11, 1956

Air Force Highest Praise on Airman

Morale has been bolstered among Alaskan fighter squadron maintenance personnel, and desire for increased technical know-how sharpened by the Airman of the Month and Year programs jointly sponsored by the Alaskan Air Command and Northrop.

These results of the programs were called out by Brigadier General T. Alan Bennett, commander of the 11th Air Division (Defense) in a recent letter to President Whitley C. Collins.

"We have carefully watched the reaction of the maintenance personnel of the three fighter squadrons at Ladd to this program," the General's letter remarked, "and I am pleasurably surprised. It may be assumed, with little degree of error, that the program has materially contributed toward better maintenance morale in our fighter squadrons. It has increased the desire by our jet mechanic personnel to acquire more knowledge in their respective fields."

". . . My estimate is that the program is one of success and will be beneficial both to Northrop and the United States Air Force. On behalf of the members of this command, I thank you for your farsightedness and consideration."

In his letter General Bennett remarked upon the consideration and courtesies extended to Staff Sergeant Richard Holden, AAC Airman of the Year in 1955, during his trip to Los Angeles at year's end and commented upon the outstanding effort made by the 18th FIS in conducting the all-ships fly-by on March 1 (the story appeared in Northrop News, March 28).

F-89 Lends Hot Bomber Control Aid

An F-89 Scorpion is helping Convair engineers to develop an efficient control system for the B-58 "Hustler" bomber, the Convair newspaper "Convairiety" has reported.

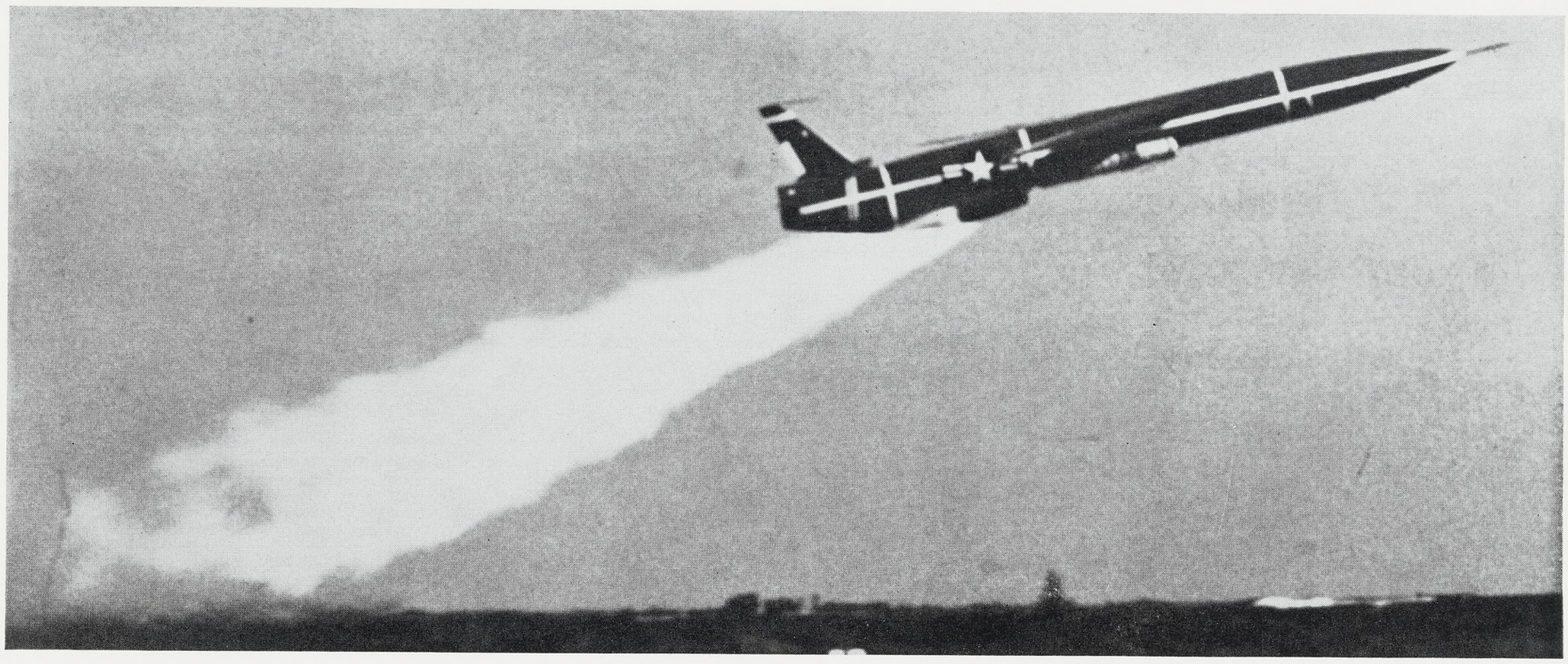
In the tests, which are being conducted at Convair's Fort Worth plant, the B-58 power control system was installed in the '89. In initial tests it did not actually control the plane, but succeeding tests saw some control. Eventually, Convair engineers stated, it will actually control the airplane, as it will the B-58.

The engineers are getting a preview of the control system, which is similar to that used in Scorpions. The F-89 was selected for the preview check-out, Convairiety reported, not only because control systems were somewhat alike, but also because "the F-89 is easy to maintain."

FIRST FLIGHT PHOTO of the Snark . . . ! Dramatic shot of the SM-62 shows the big air-breathing intercontinental missile apparently standing on two columns of jet assist thrust from her rocket take-off boosters. Taken at Cocoa Beach, these photographs (plus more, page 2) will give American public an in-action flight view of the U.S. Air Force's latest weapon.

AIRBORNE . . . ! The big red "bird", as the Snark is affectionately known to Norcrafters, climbs swiftly out over the Gulf Stream on her way to a rendezvous with a target that could be a continent away or more. Releases during past week point up fact that long-under-wraps Snark is potent attack mounting aircraft and an important part of American armament plans.

Take-off Boost

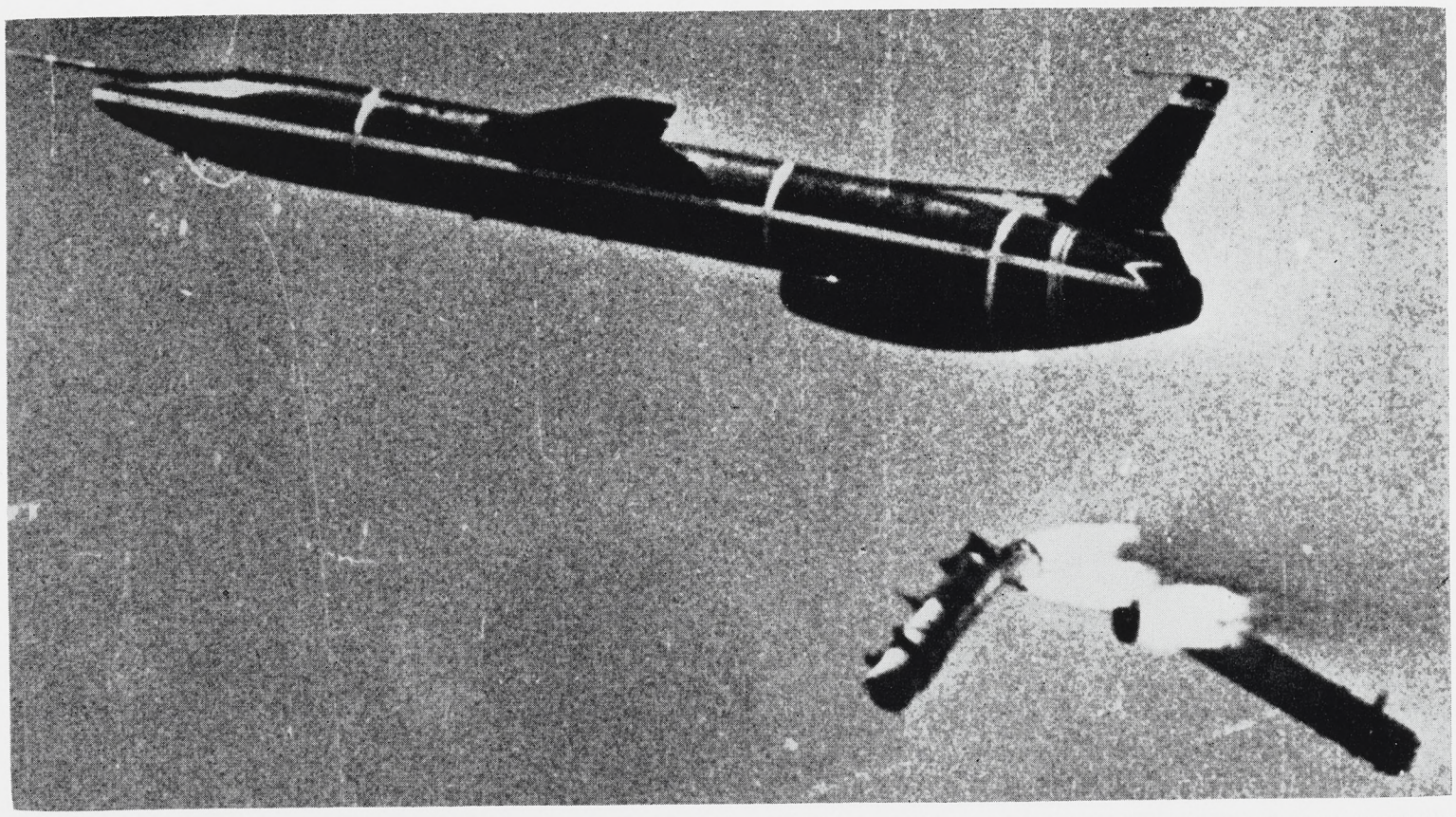


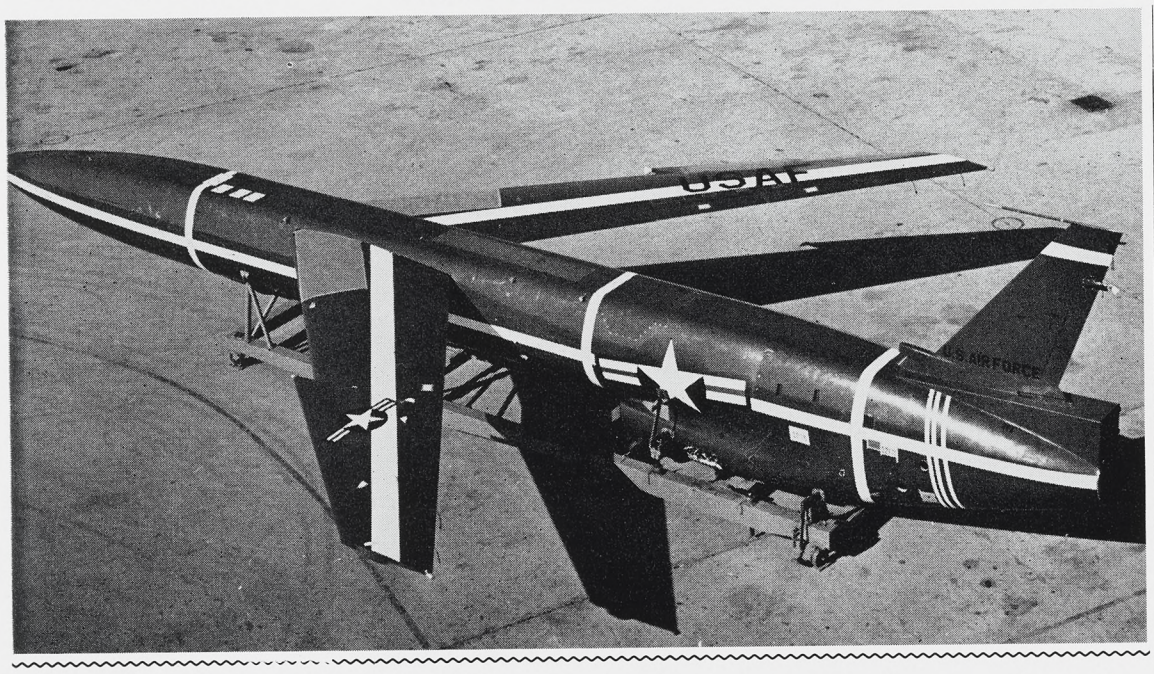
Boosters Dropped

THE SNARK drops her boosters and heads out under thrust of Allison jet engine. Chain of Norcrafter-manned radar stations across Caribbean track high-speed flight from island to island and over the vast Atlantic.

In Repose

THE SNARK at rest. This photo shows lines of SM-62—swept wings, vertical stabilizer, absence of horizontal stabilizers. Norcrafters have been at work on the Snark for over ten years. Current releases plus single photo released to the press two weeks ago are the first.





New Buildings On Schedule

Work on the new engineering research center is right on schedule, and in some areas even ahead of schedule, Ed Petoskey, director of Corporate Planning, has reported.

Buildings included in the program will soon begin to take recognizable shape, with foundations already in. The wind tunnel, whose gigantic fabricated assemblies were moved here last week from San Pedro, is now being erected on piers; and erection of structural steel on high portions of the engineering office building will begin June 14.

Figures supplied by George Warren, project engineer, and Schuyler Walker, construction superintendent — both of Vinnell Company, Inc., contractors — show that 100,000 square feet of asphalt paving were removed, and 10,000 yards of dirt excavated in the site preparation for the office building.

Altogether about 3000 cubic yards of concrete have been poured to date.

The entire Vinnell organization, starting with A. S. Vinnell, president, is highly enthused over the Northrop project.

"We feel that we are building a very distinctive type of plant layout," Warren said, "so the work means more to us than just a job. The design of the buildings has created a great deal of interest among contractors; we are proud to be associated with the project."

Warren made particular note of the excellent cooperation existing among designers (Pereira & Luckman), contractors, and Northrop, and said that the fine teamwork would make it possible to meet the schedules "right on the button".

Appreciation Via Orchids To AF Ladies

The Air Force "said it with flowers" last week and what they had to say prompted orchids for 131 Air Force secretaries and clerk-typists.

Division chiefs and supervisors of the Los Angeles Air Procurement District decided during a recent staff meeting that it was high time they expressed their appreciation of the hard work and loyalty shown by all the secretaries and clerk-typists.

The idea was enthusiastically received down to the last male employee and as a result a special "Air Force Appreciation Day" was held on Wednesday, April 4. At A-Hour, 9:00 a.m., mysterious, be-ribboned boxes were placed on the ladies' desks and by 9:03 squeals of delight from 131 surprised girls were resounding from Los Angeles to Burbank.

Colonel Robert V. Kirkland, chief of the Los Angeles Air Procurement District, San Bernardino Air Materiel Area, stated, "We feel that every member of our Air Force team is important. This is our way of letting them know it."

NRC to Elect New Officers For 15th Time

For the fifteenth time in the history of the Northrop Recreation Club, council members will gather to elect new officers for the parent club.

The election—an annual affair—will be held on April 14 this year at the NRC Clubhouse.

Council members will nominate and elect members for the following offices: president, vice-president, secretary, treasurer, and sergeant-at-arms.

Election dates for NRC vice-presidents in outlying facilities will be set by the individual facilities.

NRC members now holding top offices include: Hal Hunsberger, president; Walt DeVore, vice-president; May Hawkins, secretary; Gene Boggess, treasurer; Boyd Corwin, sergeant-at-arms.

Three-week Vacation Pay Cheers 12-year Personnel

Plant Protection Officer Francis Earl's 1956 vacation plans—and the plans of many other personnel — got a pleasant boost when the new vacation schedule went into effect last month.

The new schedule gave Norcrafters with 12 years of consecutive service three weeks of paid vacation, plus two days' sick leave pay.

Now Earl can spend an extra seven days of leisure at his in-laws' ranch near Mesa, Arizona, where he is planning to go. A third shift guard, he received his vacation and sick leave checks on the night of March 29.

He was the first 12-year Norcrafter to get the new deal. And it was, probably, quite appropriate, for Officer Earl has never been late nor absent since he started here . . .

Blueprint Control Norcrafter Maurice Adair got his check on Thursday night, March 29, too, marking 13 years of service.

And on the following day, day shift personnel Arnold Straub, Franklin Richmond, Bendit Malcombe, Ruth Miller, and Durwell Dains cashed in on the new program.

Some received extra checks for amounts not yet authorized the previous week, others their first enlarged vacation check. Their service records range from 13 to 16 years.

GOOD CITIZENRY FACES DEADLINES IN COMING DAYS

Deadline-happy newspapermen are generally interested to note that everyone is in the same boat at this time of year.

There is the deadline for voter registration — tomorrow, April 12. Deputy registrars can generally be found in a number of locations throughout the area, including many stores.

And the former Ides of March deadline—due date of income tax returns—comes up on April 15. This is one few Norcrafters (or anyone else, for that matter) have been able to forget.

But there's a saving grace—the "deadline" for standard time. Daylight saving time comes in on the 29th, and the unmatched California summer evenings are an hour longer . . .

OPEN HOUSE ATTRACTS ENGINEERS FROM AS FAR AWAY AS DARTMOUTH

Nearly 200 upper class college engineering students—including visitors from Dartmouth and Louisiana State—toured Northrop on the occasion of Engineering Open House.

Enthusiastic comments of the visiting students described the open house as the most impressive program of its type the college people had attended.

The program was cooperatively arranged by several divisions of the company to include guided tours of several areas; display of the F-89; views of the Snark on shaker test; a test run of the sled; mock-up of the Fang; and a comprehensive exhibit arranged by departments.

The open house was planned to coincide with Easter vacations of colleges and universities.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 16

Published every other Wednesday by
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
Permission to republish material with credit to the Northrop News will be granted
News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)

FOOTHILL BLVD. & RAMSDELL AVE., La Crescenta. (Can pick up in La Crescenta, Montrose, La Canada, and east portion of Glendale; will deliver at Plant 1, 2, or 3.) MELVIN L. DUNBAR (5700-31869, Ext. 2053), CH 9-6305. 12-1

WESTERN & SANTA BARBARA, Los Angeles. (Santa Barbara—8th Ave.—Crenshaw to Plant 1.) P. F. WALLMAN (5504-21446, Ext. 1424), AX 3-2670.

WESTERN & HOLLYWOOD, Hollywood. (Pick up on Western from Hollywood to Pico.) McTHAINE (5563-22182, Ext. 2011), HO 2-5012. 12-1

(Zone 7)

NORMANDIE & 225TH, Torrance. (Normandie, 146th, Van Ness, Rosecrans to Northrop; will go some out of my way if needed.) C. L. FITZJARRELL (5507-14710, Ext. 564), FA 8-2433. 12-7

(Zone 8)

GAFFEY & 24TH ST., San Pedro. (Western Ave. to Anaheim & Gaffey; Gaffey to 24th St., San Pedro; will take three passengers or exchange rides.) ROBERT LEE MINOR (5163-43965, Ext. 2288), TE 3-9789. 12-8

CRENSHAW & LOMITA BLVD., Lomita. J. L. WALLING (5583-22456, Ext. 1292.

(Zone 14)

CENTINELLA & FLORENCE, Inglewood. (Will pick up anywhere between here and Plant.) IVEN BLUM (5562-21014, Ext. 1251). 12-14

7:30 a.m. — 4:15 p.m.

(Zone 5)

PALO VERDE & STEARNS ST., Long Beach. (Am interested in areas bounded by Carson St., Atherton St., Bellflower Blvd. & Studebaker Road; car pool desired.) JOHN G. SOLTES (1810-43945, Ext. 2676), HE 4-4289. 13-5

(Zone 7)

VERMONT & 182ND, Gardena. GRACE MATHEWS (4110-13375, Ext. 2331). 13-7

(Zone 13)

SANTA MONICA & WESTWOOD or Santa Monica & Sepulveda, Los Angeles 25. (To Plant 2 or Plant 3 by way of Sepulveda Blvd. or La Cienega Freeway; car pool considered.) ALAN DELLING (3830-30616, Ext. 757), GR 9-0332.

7:30 a.m. — 5:15 p.m.

(Zone 4)

ROSEMEAD & WASHINGTON BLVD., Whittier. (Will pick up anywhere along Firestone, Imperial, Florence, Rosecrans, or El Segundo; would consider car pool.) DONALD D. MYERS (1810-43969, Ext. 2024, 2025). OX 5-6254. 14-4

4:45 p.m. — 1:15 a.m.

(Zone 5)

ORANGETHORPE & WOODS, Fullerton. (Car pool considered.) EUGENE J. SNELLER (5587-23124, Ext. 2750), LA 5-8729. 18-5

RIDES OFFERED

Miscellaneous (Split Shifts)

(Zone 8)

WEYMOUTH & 7TH, San Pedro. (Would like to form car pool; hours: 7:45 a.m. to 4:30 p.m.) GERRY GARTLAND (4110-31292, Ext. 2331), TE 2-9629. 20-8

Rides Wanted

7:00 a.m. — 3:45 p.m.

(Zone 1)

WESTERN & VENICE, Los Angeles. VINCE DIXON (5355-43567, Ext. 1575), REpublic 3-8684. 2-1

PICO & NORMANDIE or ARDMORE, Los Angeles. C. N. REED (5561-42159, Ext. 1280), RE 2-3154. 2-1

(Zone 4)

MAIN AND GARFIELD, Hollydale. (This address is about half way between Imperial Hwy. and Rosecrans Ave., both Rosecrans and Imperial cross Garfield.) DAN H. KRUCKEBERG (5524-20800, Ext. 2209), NE 6-9043. 2-4

(Zone 5)

OLIVE ST. & WILMINGTON AVE., Compton. CARRIE BARBARA (5507-25905, Ext. 725), NE 2-0640. 2-5

GARDEN GROVE BLVD. & HWY. 39, Westminster, Orange County. JOSEPH W. SMITH (5354-37338, Ext. 2252). 2-5

SANTA ANA. FRANK KENNEY (5336-44154, Ext. 501, 2735). 2-5

(Zone 6)

CHERRY & 10TH, Long Beach. JOSEPH EWING (5406-43149, Ext. 2220), HE 4-1635. 2-6

(Zone 7)

WESTERN & 174TH ST., Torrance. (Could be picked up either at the intersection of Western & 174th St. or across from Stern's Trailer Village on 174th St.) RHEDA GODFREY (5338 - 44043, Ext. 2442). 2-7

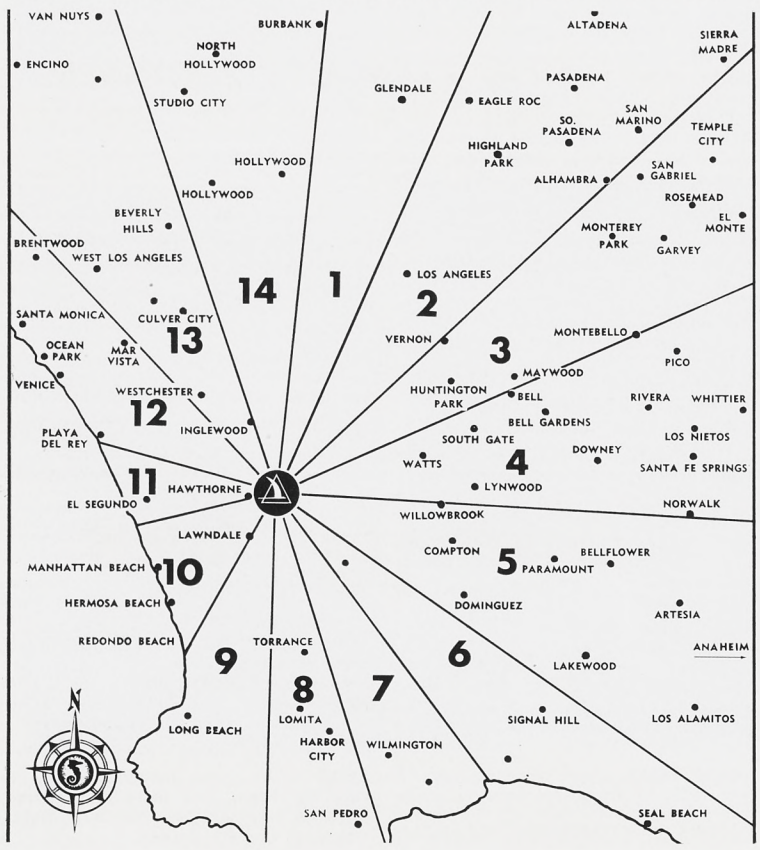
(Zone 10)

PIER & HERMOSA AVE or 19th & MANHATTAN AVE, Hermosa Beach. EVELYN M. PEARSON (5516-19204, Ext. 2745, 2270), FR 4-9963. 2-10

REDONDO AVE. & RUHLAND, Manhattan Beach. CAROL R. NOLEN (5534-21357, Ext. 2244), FR 4-4779. 2-10

AVIATION & REDONDO BEACH BLVD., Manhattan Beach. (½ block west of Aviation—3 blocks north of Redondo Beach Blvd.) LOIS MATHEWS (5534-21285, Ext. 2201), FR 9-9161. 2-10

RINDGE or VAIL AVE., North Redondo. (Will go in on car pool.) MARIAN WALTER (5353-16127, Ext. 2550), FR 4-2190. 2-10



RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 12)

FELTON AVE. & W. 118TH, Hawthorne. (If it would be impossible to pick up in mornings could arrange a.m. ride, but have found it very hard to get a steady ride because of overtime at end of shift.) LORENE H. CASTLE (5421-15155, Ext. 2242), OS 6-6604. 2-12

(Zone 13)

HARDY & INGLEWOOD AVE., Inglewood. WILLIAM GENCO (5411-16978, Ext. 2186). OR 7-0785. 2-13

(Zone 14)

NEAR BURBANK BLVD., Burbank. PAUL KELLY (5373-16655, Ext. 538), HO 3-7582. 2-14

7:30 a.m. — 4:15 p.m.

(Zone 1)

ARBOR VITAE & CRENSHAW BLVD., Inglewood. CHRISTOPHER T. RODGERS (5920-41566, Ext. 1725, 692), OR 7-9481.

(Zone 2)

MANCHESTER & VERMONT, Los Angeles. M. L. McELROY (3315-42953, Ext. 414).

VERMONT AVE. & W. 80TH ST., Los Angeles 44. VIOLET GALIOTO (5240-36585, Ext. 2667, 2668, 2669), PL 2-5732. 3-2

(Zone 3)

LAS TUNAS DR. & BURTON, San Gabriel. (Car pool considered.) LLOYD R. ZIEGLLER (5530-43093, Ext. 697). AT 6-9802. 3-3

(Zone 5)

PALO VERDE & STEARNS ST., Long Beach. (Am interested in areas bounded by Carson St., Atherton St., Bellflower Blvd. & Studebaker Road; car pool desired.) JOHN G. SOLTES (1810-43945, Ext. 2676). HE 4-4289. 3-5

STUDEBAKER & ALONDRA, Norwalk. MARK T. ADAMS (5910-35295, Ext. 2660).

SOUTH WESTERN & EL SEGUNDO, Gardena. (Live in Hollypark Tract; especially need a ride to work.) DONNA D. SCAMAHORN (3541-44012, Ext. 464, 2410), DA 9-2013. 3-5

MILLER & LA PALMA, Buena Park. (Orangethorpe to Atlantic—Atlantic to Artesia and on to Plant.) BEN LOVERIN (8100-32252, Ext. 1518 and 1519) JA 7-4378. 3-5

(Zone 6)

ALAMITOS & BROADWAY, Long Beach. (Also near Orange Ave. & 2nd St., anxious to make connection, will consider car pool.) JULE A. KLASCHKO (5940-43070, Ext. 2661). 3-6

MAGNOLIA & WILLOW, Long Beach. (Will meet at any convenient intersection; also interested in car pool with 2 or more riders.) J. D. GORDON (3410-13103, Ext. 400, 482), GA 7-4400. 3-6

(Zone 7)

MAIN ST. & WEST 225TH ST., Torrance. D. THOMPSON (6002-12203, Ext. 1308), TE 4-6097. 3-7

(Zone 8)

CRENSHAW BLVD. & 174TH ST., Torrance. JOYCE RANZENBERGER (3880-12500, Ext. 1230). DA 9-6118. 3-8

CRENSHAW & 101 HIGHWAY, Torrance. MARGARET WILSON (5339-16643, Ext. 2691). DA 6-0399. 3-8

GAFFEY & 14TH, San Pedro. ROSEMARY MORRIS (3143-14215. Ext. 454), TE 3-8520. 3-8

(Zone 9)

COMPTON BLVD. & FIRMONA AVE., Lawndale. E. A. ALLEN (5530-20152, Ext. 1840). OS 5-6209. 3-9

MADISON & SEPULVEDA or Hawthorne & Sepulveda, Torrance. JOHN B. WELSH, JR. (5530-21091, Ext. 1545), DA 6-5516.

PACIFIC COAST HIGHWAY & VINCENT ST., Redondo Beach. (Car pool preferred.) JOHN G. JAMES (3540-43783, Ext. 1516), FR 9-2886. 3-9

(Zone 10)

MARINE & HIGHLAND, Manhattan Beach. JIM MULHOLLAND (7510-43818. Ext. 2162), FR 2-8506. 3-10

HIGHLAND AVE. & 43RD ST., Manhattan Beach. ANNA HAMPTON (7510-33152, Ext. 2068, 2694), FR 9-3251. 3-10

(Zone 12)

FREEMAN & 103RD or 104TH, Inglewood 2. ILA PATTERSON (5260-26431, Ext. 683), OR 4-4032. 3-12

SEPULVEDA & WILL ROGERS, Los Angeles 45. ANNETTE ANDERSON (9350-27959, Ext. 1598), OR 7-6259. 3-12

SEPULVEDA & MANCHESTER, Los Angeles 45. LIONEL CRAFT (9350-42252, Ext. 2295). 3-12

(Zone 13)

MANCHESTER & FREEMAN BLVD., or Inglewood Ave., Inglewood. (2 rides needed.) HORTENSE BOKOR (5341-35104, Ext. 1565), OR 4-1500. 3-13

(Zone 14)

SLAUSON & WEST BLVD., Los Angeles. JOHN KENDALL (3821-12841, Ext. 1293), AX 4-6662. 3-14

3:45 p.m. — 12:15 a.m.

(Zone 7)

CRENSHAW & ROSECRANS, Hawthorne. RUTH DRAPER (5351-43592, Ext. 1706), OS 6-9179. 6-7

(Zone 8)

CABRILLO & 4TH, San Pedro. D. H. VERDURMEN (5515-22459. Ext. 1809), TE 2-0949. 6-8

Hydraulic Vendors Aid Northrop Talent Pool

One of the latest in the series of vendor-vendee meetings arranged by Quality Control and Materiel has featured discussions relating to hydraulic components.

Vendors of hydraulic parts met with Materiel, Quality Control, Manufacturing, and Engineering personnel to talk over mutual needs. The meetings are a vital part of a continuing Northrop Product Improvement Program (see Northrop News, November 6, 1955).

The program is aimed at utilizing the proved skills of vendors effectively in providing assemblies of highest quality for Northrop products.

Success of the program was indicated by remarks of Jack Hinchliffe, manager of Materiel.

Hinchliffe stated that the current meetings are the forerunner of "even bigger symposia we are planning on the procurement of new major assemblies and families of minor sub-assemblies."

"Coming meetings will continue to pool the talents and efforts of engineering, production, inspection, and purchasing personnel as they relate to vendor supplies," Hinchliffe said.

February's meeting included, in addition to Hinchliffe's talk, discussions by W. F. Talbot, Hydraulics and Pneumatics (Engineering); Jack Mannion and Murray Colwell, Quality Control; Karl Pope, Materiel; and Paul Jacobs, Manufacturing. Marie Allison, Public Relations, conducted the vendors on a tour of the Hydraulics department.

The conferences have already succeeded in establishing a firm area of understanding between Northrop and the vendors who supply needed parts.

Northrop design, production, quality, and supply representatives have discovered that the series pays off in maximum results in the qualification and environmental testing of vendor products.

LOCAL AFA GROUP SCHEDULES DANCE ON FRIDAY NIGHT

Air Force Association members of the Air Harbor Squadron have issued an invitation to potential members to attend their membership dance at the NRC Clubhouse Annex this Friday, April 13.

The local squadron is encouraging membership of citizens in the area. Carl Brinke, Northrop tool designer, the current commander of the group, emphasizes that the only requisite for joining is a sincere interest in the growth of air power in the United States.

About 75 members are listed on the squadron roster presently, with the ladies' auxiliary numbering 60.

Music for the dance is furnished by Ray Phillips and his orchestra. Admission is 50 cents; refreshments, $1.

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

RIDES WANTED

3:45 p.m. — 12:15 a.m.

(Zone 10)

MANHATTAN BLVD. & MANHATTAN BEACH, Manhattan Beach. C. T. JENNINGS (5516-40059, Ext. 540, 533). 6-10

(Zone 12)

AIRPORT WAY & 93RD, Los Angeles. EUGENE SOSBEE (5520-43147, Ext. 1233), OR 4-4260. 6-12

4:45 p.m. — 1:15 a.m.

(Zone 2)

JEFFERSON & BROADWAY, Los Angeles 7. FRANK J. KOCH (5354-16458, Ext. 468). 8-2

(Zone 3)

CENTURY & NORMANDIE, Los Angeles. RAY C. ACREE (5562-37445, Ext. 1209), PL 5-2306. 8-3

Miscellaneous—Split Shift

(Zone 1)

ARBOR VITAE ST. & 7TH AVE., Inglewood. (Near Crenshaw & Manchester, Mariposa; hours: 4:00 p.m. to 12:30 a.m.) KAY LAM (6270-25514, Ext. 631), PL 5-0752. 10-1

(Zone 2)

VERMONT & 51ST or 51st & Normandie, Los Angeles. (Hours: 4:15 p.m. to 12:45 a.m.) GLORIANNE JONES (9330-41955, Ext. 2228), PL 9-7498. 10-2

(Zone 8)

WEYMOUTH & 7TH, San Pedro. (Would like to form car pool; hours: 7:45 a.m. to 4:30 p.m.) GERRY GARTLAND (4110-31292, Ext. 2331), TE 2-9629. 10-8

(Zone 13)

SEPULVEDA & CENTINELA or Sepulveda & Sawtelle, Culver City. (Want ride to work only; hours: 4:15 p.m. to 12:45 a.m.) GINGER ARKILL (5538-21580, Ext. 525, 2185), EX 8-4007. 10-13

AIA Report Sees Future Great Gains

The great progress of the American aircraft industry in 1955 is only the forerunner of an even greater future, the annual report of the Aircraft Industries Association, recently released, emphasizes.

A new research plane with Mach 3 speed expectations is scheduled to fly this year, the report says, Guided missile development and production will forge ahead. Turbojet and turboprop engines of vastly greater power are in production or under development.

In the field of research and development, the report continues, the aircraft industry "will find its real strength in the availability of long experienced company management teams," as it studies such items as the development of atomic-powered aircraft; intercontinental ballistic missiles; creation of an earth satellite; and the challeges of the "thermal" barrier.

The industry produced about 13,000 airplanes last year, the organization reported. Approximately 8500 of these were military. The comparable figures for the preceding year were 13,000 and 9600.

Guided missile manufacture became a major factor in the industry during the fiscal year reported by the AIA, with volume of sales exceeding the half-billion dollar mark.

The AIA has 139 members, including all major airframe and engine manufacturers and many major suppliers of aircraft equipment. Northrop is a member company, and a large number of Northrop personnel serve on the AIA committees.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — noon Wednesday one week before publication.

FOR SALE

GUN, Colt, auto. .22 L.R., 6" barrel, holster, $35. E. EIDE. Write to Northrop News, Box 1617. A

MOTORCYCLES, Triumph Trophy, $350; Francis Barnett, 200cc, $200; G.E. 12½" T.V., needs work, $30. R. W. KING. GR 7-1937. A

MOTORCYCLE, 1953 Harley Davidson model "165," $175 cash. Write to Northrop News, Box 1616. A

ELECTRIC SHAVER. Schick 25. 1956 model, $15. WM. BURCH. Write to Northrop News, Box 1615. A

OUTBOARD racing motor, 7½ h.p. Mercury .010 oversize, Kapok life jacket, Kamic stainless prop., $225. M. A. LUTES. Write to Northrop News, Box 1614. A

GOLF CLUBS. 4 Spalding, power weighted, tournament Top Flite, $30. WM. LAVOIE, EX 7-8638. A

LAND. 14 acres, Palmdale, 910' frontage, 15 space trailer park, spring fed fish pond, 2 artesian wells, 20'x25' living quarters. $32,500, $12,000 down, $120 month at 5½%; SCOOTER, Salisbury, new carb., $70. POP MOSER, WI 7-3672. Palmdale. A

BICYCLE, girls', $14. After 5 p.m. OS 5-6473. A

FORD, model "A." OR 2-9206. A

SPEEDBOAT, 18' Collins inboard, Mercury engine all equipment, includes skis, ski rope, 1956 trailer license, 2 extra propeller shafts, $900. PAUL SCHLUE OS 6-3319. A

PLYWOOD, 21 sheets 4'x8'x¾", never used, sell all or part, $8 sheet; TRAILER 4'x9' all metal, $35; 4'x8' CAMPING TRAILER, has windows, back door. M. KRAVETS, TO 9-8937. A

MOTORCYCLE. 1955 KH Harley Davidson, $700. OS 5-5231.

BED DIVAN, CHAIR, chocolate brown, nylon frieze. $125. EX 1-3114. A

JEEP, 1943 military. 5 new tires, $500. ME 3-7326. A

BOAT, 16' V-bottom plywood, fibre glassed, trailer, 16 h.p. motor. Write to Northrop News, Box 1612. A

OUTBOARD MOTOR, 1950, 10 h.p. Johnson, $130. LOUIS PETKOW TE 2-9378.

POWER MOWER, make offer. FLORENCE WILKERSON, FR 9-5901. A

CHRYSLER, 1952 V-8 4-door sedan, $900. WH 2-4951 after 5 p.m. A

SAW, 8" Craftsman ¾ hp, bench, 8" planer, many extras $160. LEROY M. WACO, GL 4-4359. A

WIRE RECORDER and 78 rpm RECORD PLAYER combination, portable, extra wire spools. HALL EVANS, AX 4-7304. A

DINING ROOM SET, Duncan Phyfe, table, 6 chairs buffet, price open. OS 6-4454. A

COIN COLLECTION, 158 pieces, dating back to 1563, best offer over $15; BOWLING BALL, BAG, and bowling SLIPPERS, size 10½ used one season, best offer over $20. Write to Northrop News, Box 1611. A

GEIGER COUNTER, electric counts, Bismuth tube, used once, $90; other PROSPECTING EQUIPMENT. PL 6-3359. A

MOTORCYCLE, 1952, 30.50, $350. C. E. GARCIA, OS 6-8321. A

FORD, 1952 Fordomatic, 4-door sedan, $775. BRUCE SNITZLER, FR 2-6288 before 3 p.m. A

WASHER-DRYER, automatic, Bendix, Duomatic, nearly new. $300. OR 2-7588 after 4 p.m. A

TELEPHONE, antique country style; twin size FOLDING BED; stainless steel DRIPOLATOR; oil PAINTINGS; STEMWARE; miscellaneous BRIC-A-BRAC, reasonable. OR 4-2623. A

TRAILER, Sears caster wheel, cost $80, $35, improved. FR 5-3110. A

FREEZER. Coolerator, chest type, 8½ cu. ft., quick freeze compartment, cost $800, $400. ME 3-7326. A

FORD, 1950 club coupe, overdrive. ROBERT STEINBECK, PL 7-1605. A

FENCE and GATE, for driveway 38'x16'. TED HERZOG, PL 1-2784. A

MOTORCYCLE, 1955 Tiger 110. 4 months old. $750. DON GULSERIAN, OS 5-6449.

OSCILLOSCOPE, 0-10; TS-4 sweep signal GENERATOR, just built, $100 for both or make offer. G. E. WITHERS. Write Northrop News Box 1607. A

FLOOR WAXER, Kirby, never used, $20. COLLEEN A. BROOKS, FR 2-7744. A

TRANSMITTER-RECEIVER, Collins M.B.F., converted for 6 meter operation, using 6 m.c. crystals, $50; RECEIVER AND SPEAKER, Hallicrafter SX25, $60. W. K. CLINE. Write Northrop News, Box 1606.

FOG LIGHTS, two sealed beam, $5; auto RADIO, $5; four 6:70-15 TUBES, 50c each; 1940 Ford TRANSMISSION, $5; 1940 Ford HOOD, $5. WINDSOR TAUNTON. AX 1-2500. A

CRIB without mattress, $12.50; YOUTH BED and mattress, $20. TO 4-4277. A

FOR SALE

WRIST WATCH, girl's, $15. CR 1-1612. A

OLDSMOBILE, 1948 4-door, $150. J. M. HOSNER, OR 2-0517. A

ROOFING, fiberglass, 400 sq ft. Ornyte panels, Coppertone, $150. S. L. PETERSON, PL 6-8095. A

TRUCK, 1948 1 ton GMC, flat bed, stake sides, $300 or best offer. M. W. TREMAYNE, JR., FR 4-9280. A

SPEAKER SYSTEM, Klipsch Rebel V with 2-way University system, $80; PHONO-RECORD CHANGER, 3-speed Webcor, mahogany case, $25. R. HINZ. Write to Northrop News, Box 1604. A

FORD, 1937 2-dr., motor 2 yrs. old, $65. TOM SELLINGER. EX 6-3594. A

RANGE Wedgewood 36", automatic clock, free delivery, $55; Norge REFRIGERATOR, 6', guaranteed 3 months, free delivery $25. L. MITTS, DA 4-3051. A

SCALES, Toledo market type $25; 1954 Harley MOTORCYCLE, $550; 1948 CHRYSLER, $150. W. T. FERRIS, PL 4-6130. A

HEARING AID, Beltone, very reasonable. DAVID MAPLE OS 6-4968. A

HOUSE, stucco, 2 bedrooms and den, 3 years old, fenced, near school, markets, $8950, sell for $50 down, $25 per week, or other terms. M. K. FOWLKES. OR 1-3710. A

FORD, 1941, good for parts, $35; FORD, 1941 coupe, $75. C. E. AGAJANIAN, PL 6-7074. A

SPEAKER SYSTEM E. V. Patrician 4-way, less than 1 year old $550. J. NATER, FR 5-7789. A

HOUSE, 2 bedroom, stucco, 4 yrs. old, redecorated, double garage, R4, property 50x187, room to build. PL 4-9549. A

OLDSMOBILE, 1953, 98, 4-door sedan, Dynaflow, power equip., $1650 or finance at 7%. D. J. CORRIGAN, OR 1-6986. A

HOUSE, 3 bedroom, Palmdale, 2 years old $10,750, payments $65. 4¼% F.H.A. loan, $2000 down. LLOYD O. JOHNSON, ME 3-4639. A

CHAIR, upholstered, slip covers, cost $120, $25. OS 6-5491. A

TELEPHONE STAND, maple, $12; Webcor RECORD PLAYER, 3 speed, $35. VIRGINIA EVANS, GA 1-1984. A

KITCHEN RANGE, Estate, $45. W. W. KELLY, PL 4-9637. A

BABY CRIB, spring mattress; HIGH CHAIR, plastic tray; TEETER-BABE, make offer. J. G. RASHID, FA 8-2800. A

OUTBOARD MOTOR, Scott Atwater, 7½ h.p., shift, 5 gal. gas tank, stand, 1954, $110. VERNON SEYFRIED, NE 5-3921.

CHILD'S FURNITURE, youth bed, small dresser, chest, baby's chest, stroller, etc., reasonable. H. A. EDINGER, PL 6-6174.

TRAILER, 2-wheel, 2 spare wheels, tires; REFRIGERATOR, 6' Servel; BENDIX. OR 2-5756. A

TIRES, four, 820-15, good, used, Firestone. F. W. GANSEMER, OS 6-5592. A

VOLKSWAGEN, 1955, $1495; 1952 Bendix AUTOMATIC WASHER, Economat, $40. GERRY GARTLAND. TE 2-9629. A

MIRROR, plate glass, beveled edge, 36" x 48", ready for hanging, $30. M. SETZER, OS 6-8315, after 5 p.m. A

RECORDS, 45 RPM, 24 assorted albums, 3 to 4 records each, $20. LARRY LAUER, FR 4-4140. A

HOUSE, Manhattan Beach, 3 bedrooms, bath and ½, double garage, garbage disposal, fireplace, thermostat, less than 1 year old, immediate possession, $13,250, $850 down will handle. Write to Northrop News, Box 1621. A

POWER MOWER, EDGER, ¼ h.p., Briggs-Stratton, cost $132, $75. OR 1-3465, after 4:30 p.m. A

RIFLE, Mossberg, semi-automatic, .22 cal., 15 shot, sling, $40. FA 8-3306. A

TILTBACK CHAIR, overstuffed, with ottoman, $15. A. W. WHITTEMORE, OR 4-2785. A

REFRIGERATOR, Coldspot, 7½', 7 years old, $75; AUTOMATIC WASHER, ABC, 5 years old, $35. OR 1-4304. A

HOUSE, 3-bedroom stucco, near Torrance, 3 years old, near schools, markets, $9350, $50 down, $25 per week, or terms to suit buyer. TE 4-7305, 6 to 9 p.m. or weekends. A

REFRIGERATOR, Frigidaire, 9 cubic feet, $50. L. N. LARRENTREE, OR 1-4474. A

MICROPHONE, professional Slim-X, 50-12,000, chrome stand, neck strap, desk mount, original cartons and specs. DON CLARK, OR 4-0762. A

HOUSE DOORS, interior, 5 standard size, paneled, all 5 for $12. Write to Northrop News, Box 1620. A

FORD, 1948 Tudor, $125; WEDDING GOWN, veil, lace with satin, worn once, size 14, cost $250, $100; PLYMOUTH, 1949, $300. PAT COLBERT, FR 5-1565. A

BADMINTON SET, Wilson, 4 rackets, make offer. PL 2-9597. A

HOUSE TRAILER, sleeps 4, 27', $400. RUTH N. CAMPBELL, DA 4-8462. A

AUTOMATIC WASHER, Kelvinator, $50. N. M. SCHILZ, FR 4-7432. A

FOR SALE

FORD, 1948 tudor, V-8, $150. ROCKY BARNUM. Write to Northrop News, Box 1624. A

REFRIGERATOR, $10; LAWN MOWER, $5. LORAIN M. BELL, FR 9-3688. A

COINS, one of each, 1894 and 1905 2½ dollar gold coin, uncirculated. OS 6-5491. A

RANGE, O'Keefe & Merritt, double broiler and oven; Sears one-wheel TRAILER, make offer. E. C. MILES. Write to Northrop News, Box 1619. A

BUICK, 1947, super sedanette, make offer. OR 2-0489, evenings. A

BICYCLES, 2 girl's, 24" balloon tires, $15 each. G. L. DEVENDORF, OS 6-7588. A

STEEL GUITAR, student's Hawaiian, case, amplifier, $50. ANDY TITUS, OS 6-8997.

NASH, 1941, 2-door sedan, $95 or best offer. A. MACLEOD. Write to Northrop News, Box 1618. A

BATHINETTE, $10; BABY CARRIAGE - CAR BED combination, $5; HEADBOARD for double bed, built-in book shelf, $5; walnut dining room TABLE, $5. BILL ST. JAMES, OR 2-5804. A

TYPEWRITER, Underwood office, $30. JOHN P. PATRICH, DA 9-3433. A

POTTIE CHAIR, Babyline, $7. J. CELONI, RE 1-4496. A

MERCURY, 1953, 4-door Monterey, overdrive, $1000. NE 5-2265, after 5 p.m.

NASH, Statesman, overdrive, $750. JOHN BOLL, OS 5-2572. A

MANIFOLD, Offie, 2 port, w/carbs. and chrome bonnets, $30; Fenton alum. RACING HEADS, 8.5:1, $30, both for '49 Mercury. FRANK FERREN, FR 9-4081. A

SLIDE PROJECTOR, La Belle "500", automatic, case, 2 extra slide magazines, used little, $75. CURTIS D. CRAIG. Write to Northrop News, Box 1628. A

TIRES, two, 600x16. KENNETH BEYER, OR 7-3922. A

BOILER, Steamaster, 3½ h.p., $150; stainless steel KETTLES, 60 and 80 gallon capacity, $25 each. RAY LA PALME, DA 9-4065. A

AIR RIFLE, .22; LETTERING BRUSHES; BUGGY FRAME, wheels; electric HOT PLATE. PL 2-9597. A

SOFA, CHAIR, wrought iron, $70; innerspring MATTRESS, BOX SPRINGS. $40. EX 1-2510, 9:00 a.m. to 6:00 p.m. A

HYDROPLANE, 225 cu. in. inboard, V-8 motor, all steel trailer, $300; 4'x6' BOX TRAILER, $15. NE 2-7610. A

WASHING MACHINE, Sears, wringer, 3 years old, $55. JOHN SHERRILL. Write to Northrop News, Box 1626. A

STUDEBAKER, 1949, Commander "6", overdrive, $150. D. W. CALLARD. Write to Northrop News, Box 1625. A

BICYCLE, Higgins full size girl's, $12.50. B. KRAMER, DA 4-6484. A

MOTOR SCOOTER, Allstate, 3-speed trans., cost $325, $230 cash. FR 4-4986, between 11:00 a.m. and 4:00 p.m. A

MIXER, Kitchen-Aid; Desert Air LAMP; SUN LAMP, reasonable. M. T. NORTHRUP, AX 1-6653. A

CHEVROLET, 1938 tudor, $50. E. C. STRUBLE, DA 9-2047. A

RUNABOUT, 14', plywood, 5' beam, fiberglassed on bottom, $325. J. RAYNER, DA 6-4744. A

FORD, 1949 convertible, new transmission, rebuilt motor, $200. FR 9-9888. A

PIANO, baby grand, Brambach, $350. AGNES E. SNYDER, OR 2-1402. A

BOAT, 12', runabout, fibreglassed, $150, Scott Atwater motor. FR 4-2190. A

FURNITURE, divan, chair, 2 steptables, coffee table, lamp, $100 for all; FRIGIDAIRE, 2½ years old, reasonable. DA 9-6765. A

LIGHT FIXTURES, fluorescent, $5 each; DRILL PRESS VISE, $6; ELECTRIC RAZOR, $6; STEAK BROILER, $15. R. CONNELY JR., OR 8-6548. A

MAPLE FURNITURE, living room, dinette, bedroom and kitchen, includes 17" TV, two 9x12 shag rugs, wringer washer, all 18 months old, sell lot only, cost $2200, $700, $200 down and payments of $33 per month on balance. CLARENCE ANDERS, PL 6-2138, after 5 p.m.

FISHING BOAT, 36', commercial, Buda engine, 5 ton hold, Monel shaft, sleeps 2, $1000 cash. T. R. STONE, DU 7-9838, Rm. 20. A

TROPICAL FISH EQUIPMENT, two 15 gal. tanks, stands, etc., $50; SUN-VISOR, fits '50 to '53 Buick or Cadillac, never used, $15. PL 5-0138, before 3 p.m. A

MERCURY, 1946 club coupe, $100. FR 5-0891. A

FORD, 1946 V-8 convertible, $150. NORMA CLARKE, EX 8-1424. A

FORD, 1940, new interior, $200. B. V. MORLEY, OS 6-1555. A

PUPPIES, 2/3 German shepherd, 1/3 collie, born March 24, available May 5, males $15, females $12. FR 5-2934. A

DINING SET, mahogany, Duncan-Phyfe, table, 6 chairs, buffet; walnut CHEST OF DRAWERS. PL 4-8289, after 2 p.m. A

FORD, 1952 Victoria, Fordomatic, $1000 or best offer. OR 8-7318. A

STUDY DESK, 3-drawer, $8; Conlon IRONER, porcelain cabinet, $25; kitchen UTILITY TABLE, $2; camper's metal ICE BOX; small GAS HEATER; deep porcelain LAUNDRY SINK, swing attachments. J. R. MORLEY, VE 8-9295. A

FOR SALE

TV, Admiral, 12½", limed oak cabinet, $75. J. P. KANE, OR 1-1114. A

CONTOUR CHAIR, Birk-Loc, green plastic. OS 5-7993. A

COUCH, 2-piece sectional, makes bed, $45. J. C. COLLINS, TE 2-0578. A

E.M.W. CONVERTIBLE, 1952 club coupe, 6, OVH. H. E. SIPE, FR 2-9559. A

UNDERWATER CAMERA, movie, 8mm, Keystone, $45; RUBBER LIFE RAFT, 5-man, $45. W. DEDON, EX 4-1982. A

DE SOTO, 1940, $75. RUTH CAMPBELL, DA 4-8462. A

CHROME TABLE, yellow, extension, 4 chairs, $40. GRACE BARNHART, DA 4-7510. A

NASH, 1955 4-door Statesman super, automatic shift, $200 for equity, take over payments. AX 4-4917. A

CHORD ORGAN, Hammond electric, walnut finish, $800. FR 2-7143, between 8 a.m. and 8 p.m. A

FORD TRUCK, all metal enclosed body, 1941, with 1948 motor, $225. R. E. JAAP, FR 9-0555, after 5 p.m. A

CAMERA, Stereo Videon, 3-D, case, $60. STEVE SABO, OR 1-4172. A

SOUND PROJECTOR, 16mm RCA Victor, $100; 16mm Victor CAMERA, $50; Weston Master EXPOSURE METER, $15; 5' SCREEN, $10; 1200' Craig REWINDS, $10; 2 SOUND FILMS, $5; PORTABLE PLAYER and WIRE RECORDER, $25. OS 5-5829. A

HOUSE, 3-bedroom, 2-car garage, w/w carpeting, water softener, rose gardens, 1½ miles from Northrop. OS 5-2770, after 5 p.m. A

SILVERWARE, 62 pc. service for 8, used little, best offer. FR 5-9885, evenings and weekends. A

WANTED TO BUY

BABY STROLLER. M. L. McELROY. Write to Northrop News, Box 1603. B

EVINRUDE, 25 h.p., late model; STEERING WHEEL; CABLES; REMOTE CONTROLS. Send description and price. Write to Northrop News, Box 1605. B

GOLF CLUBS, prefer late model steel shaft type, #5 through #7 weight, complete set, pay cash. B. E. ROBERSON, FR 2-6486. B

CASH REGISTER, used, reasonable, will consider unit needing minor repair; GARAGE DOORS, overhead, two, single, standard size; SHEATHING LUMBER; ROOFING MATERIAL; used O.K., reasonable. C. W. WOLCOTT, OS 5-1123. B

FIBREGLAS or Lucite for patio roof, approx. 525 feet wanted. M. KRAVETS, TO 9-8937. B

LIFE RAFT, rubber, and/or equipment, any condition. TO 7-8270. B

OVERLOAD SPRINGS; TRAILER HITCH. Write to Northrop News, Box 1613. B

HOME WORKSHOP, used, DeWalt, ¾ h.p. only. J. L. THURMOND, AX 1-0483, message. B

CAR, Chevrolet or Ford, 1941 or later, must be in good condition, not over $100. R. H. PAYNE, GA 5-8154. B

BICYCLE, girl's 20", good condition. W. W. LUND, JR., OS 5-6041. B

SKI BOAT, good inboard, preferably cracker box type. F. M. ROSENSTIEL, NE 2-7610. B

PICKET FENCE, used, good condition; good SOIL for flower beds. I. M. PATTERSON, OR 4-4032. B

FOR TRADE

LOTS, four, 82½'x125' each, Quartz Hill, 7 miles west of Palmdale airport, water and electricity, will trade for Los Angeles property, what have you? E. M. MOODY, WE 1-3359. C

STATION WAGON, Ford 4-door Country Sedan, Fordomatic, trade for 1954 Cadillac. JOE REED, DA 6-5558. C

DODGE, 1948, ¾-ton pickup, trade for ½-ton pickup truck or jeep in good condition. PAUL KOERSCHGEN, DA 9-1930. C

OLDSMOBILE, 1946 sedan, Hydra-Matic, trade for camping equipment, tent, sleeping bags, stove, etc. OS 5-3596.

FORD, 1955 Fairlane, Fordomatic, trade equity for 1952-53 Ford or Chevrolet or 1953 Nash Rambler. C. A. LAW. Write to Northrop News, Box 1627. C

SAW, 8" Craftsman, ¾ h.p., stand; 8" PLANER; ½" SKILL DRILL, trade for outboard motor, Evinrude or Johnson, 10 h.p. or more. LEROY M. WACO, GL 4-4359. C

FOR SALE OR TRADE

GAS RANGE, Vesta, full size, sell or trade for power mower, small piano, or contour chair. CHARLES C. LYONS. Write to Northrop News, Box 1608. M

BASE REFLEX ENCLOSURE, Altec Lansing, for 15" speaker, $20, or trade for 12" enclosure or amp., etc. T. PLUMMER, DA 6-2214. M

DESK, walnut Provincial; 2 SOFA BEDS; chairside console RADIO, Zenith; CHINA CABINET, walnut; Southwind CAR HEATER; 10" RCA TV, table model; Nesco ROASTER, stand, need tape recorder or what have you? JOE HORKA, OS 5-4954. M

ARBOR PRESS, screw type, presses 20 tons, $50, or trade for welding equipment, compressor, or electric motor. THOMAS J. ESTERBROOK, OS 5-8644.

FOR SALE OR TRADE

LINCOLN, 1947, make offer. BRUNO ZURAWSKI, RE 3-5313. M

PLYMOUTH, 1947 club coupe, sell parts or whole, good motor, or trade for ? Consider older model, car was in accident. GERALD R. SIMMONS, PL 5-2747.

WASHING MACHINE, Sears, $10 or will trade for ? DON CLARK, RI 8-4858. M

CADILLAC, 1955 convertible, cost $6000, sell $4500, $1100 down or will take trade. TE 4-7305. M

HOUSE, Inglewood, 2-bedroom house, income $75 month, M-1 50x170 ft. lot, room to build, $8950, or will trade for other property. JOSEPH P. KANE, OR 1-1114. A

BOAT, 21', small cabin, fiberglass bottom, bow, 6 cyl. Gray marine, $600, best offer, or trade for 14' to 20' house trailer, late model, or ? DELMAR M. MOLLE, ME 3-5995 days or ME 3-7175 after 5:00. M

BABY BUTLER. $10; Murray small TRICYCLE, $5, want girl's 20" bike. FA 8-3306. M

ROTOBROIL, "400"; 16" Emerson TV; small BINOCULARS; Universal electric COFFEE MAKER; ladies' blue DINNER DRESS, size 12-14. OR 4-4032. M

MOTORCYCLE ENGINE and transmission, Harley 1928 single cyl., 22.5 cu. in., $30 or trade for binoculars. EX 7-5938. M

CROSLEY, 1948, 1950 cast iron block, $95 as is. ROBERT A. SKIPPER. PL 6-6130, after 5 p.m. M

RENTALS OFFERED

TRAILER HOUSE, 3-room, fenced, shower, utilities paid, near plant, $60 month for two. ETHEL TROWBRIDGE, OS 6-6577, after 4 p.m. E

HOUSE, 3-bedroom, fenced, newly decorated, near school, shopping, will lease with option to buy, water paid, $82.50. CHARLES C. LYONS. Write to Northrop News, Box 1609. E

BUILDING, 20'x40', near 154th and Hawthorne Blvd., $50 per month. Write to Northrop News, Box 1602. E

APARTMENT, modern, 1-bedroom, dinette, disposal, laundry room, $75 month. HERSHMAN, AX 3-5662. E

HOUSE, furnished, 2-bedroom, fenced, garage, near Northrop, $80 per month plus utilities. C. W. WOLCOTT, OS 5-1123, message. E

HOUSES, two on lot, fenced yards, water paid, one 2-bedroom, $75, one 1-bedroom, $50. CHARLES E. SATTERLEE, OS 6-8512. E

ROOM, nicely furnished, private home, near Northrop, DA 4-4410. E

APARTMENT, 1-bedroom, Bermuda, private patio, garbage disposal, garage, unfurnished, Inglewood, adults, $75. EDWARD L. BRAY, OR 4-6163. E

HOUSE, unfurnished 2-bedroom, $65 month. C. BLACKLEDGE, OS 5-9011. E

APARTMENTS, furnished lower bachelor, garage, patio, near beach, Manhattan Beach, available April 15; 1-bedroom furnished upper, near beach and town, sun deck, garage. FR 5-4118. E

SHARE APARTMENT, one, two or three young men to share studio apartment, Hermosa Beach, 3 blocks from beach, garage available. RAY HINKLEY, AX 3-3662. E

HOUSE, 3-bedroom, 18 months old, fenced, close to schools, Torrance, water paid, $95 month. BARBARA PENKE, FA 8-1628, after 5:00 p.m. E

SLEEPING ROOM, private entrance, near Plant 1, $6 per week. G. C. FULTON, OS 6-7104, after 4:30 p.m. E

APARTMENT, unfurnished, near Northrop, disposal, garage, 3 rooms, $65 month, adults only. OR 7-4388. E

ROOM, outside entrance near Plant #1, $8 per week. H. R. STANLEY, OS 5-1450.

APARTMENTS, 1-bedroom, garage, service porch, garbage disposal, 2 blocks to Plants 1 and 2. $70 and $72.50. R. W. FEENY, EA 2-0646. E

SHARE APARTMENT, woman to share apartment, Westchester, near stores and transportation. PL 4-8289, after 2 p.m.

HOUSE, 2-bedroom, attached garage, fenced, 2 or 3 children O.K., $85 month, water paid, North Redondo. OS 6-6074.

RENTALS WANTED

HOUSE, 2-bedroom, unfurnished, vicinity 90th and Normandie, $75. V. LIDELL, PL 1-6161. F

HOUSE, 3-bedroom, fenced yard, garage, Hawthorne, Lawndale or Inglewood, will lease at $85 to $90 month. J. D. HALSTEAD, OS 5-7774, after 5 p.m. F

APARTMENT, furnished bachelor or 1-bedroom, needed by May 1, prefer location near Crenshaw Blvd. JUDITH A. PUESTOW, OR 8-7930. F

CHILD CARE OFFERED

CHILD CARE, ages 3 to 10 years, fenced, near school, day or night shift, hot lunches, naps. OS 5-7993. G

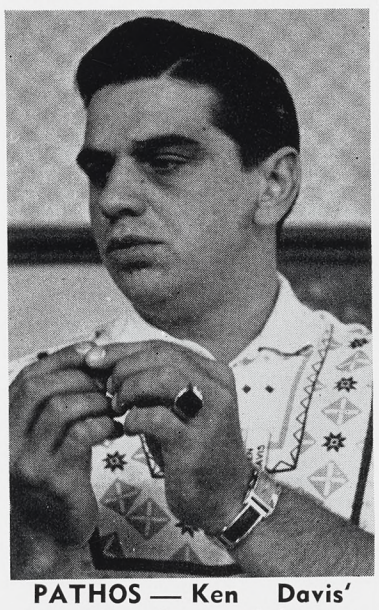
CHILD CARE, day or night, licensed, close to school, play yard, hot lunches, naps if desired. OS 6-6566. G

CHILD CARE OFFERED

CHILD CARE, kind motherly woman to care for home and three (3) children, working parents, may live in 5 nights, weekend off. DA 6-1444. H

Toastmasters Try Hand With Thespian Type Oratory Work

HAPPINESS — Lloyd George's blissful look was result of Cadillac talk.



PATHOS — Ken Davis' transfer from night to day shift was topic here.

DERISION — Ditch the phony morticians—is reaction of Sam Grutsis.

If only Cecil B. DeMille could have seen them!

Northrop Toastmasters—night shift Norair 1398 club—were handed the tricky task of wringing specific emotions from their listeners during table topic sessions. The pictures on this page (caught for posterity by Northrop photographer Paul Wheeler) are a few samples of their success.

Following their thespian oratory the members settled down to their businesslike job of converting neophytes into polished examples of the public speaking art. Members are given instruction in proper speech practices including stance, grammar, diction, and intonation.

The best speech of the day award went to Art Griese—and it was his first formal speech before the club!

Newly-elected officers of the club—installed last week—include Sam Grutsis, president; Bill Cox, educational vice-president; Jack Miller, administrative vice-president; Howard Stoten, secretary; Bill Jesse, treasurer; Lloyd George, sergeant-at-arms; Pat Garrett, publicity. Ken Davidson is past president.

But the real business of the club for the day was all wrapped up in the rapt expressions candidly caught by the camera.

Skin Divers Get Scoop On Shellfish

Prospects are looking up for abalone hunters.

Skin divers will be interested to know that marine fisheries men of the California Department of Fish and Game recently transplanted 660 red abalones along the rocky shores of Catalina Island.

This is the first such experiment on any sizeable scale, states recent DFG release, and if the experiment works, this may prove a practical method of establishing abalone populations in likely spots not currently inhabited by the prized shellfish.

All abalones were tagged, and will be observed at intervals to trace movement, growth, survival, and condition. Skin divers who catch the tagged specimens should report the finds to the Department of Fish and Game.

SPORTS

The Northrop News

SC GYMKHANA SLATED

Motors will roar and tires will squeal as one of the biggest events in NRC Sports Car Club history gets under way next Sunday, April 15.

The headliner—the Northrop SCC Gymkhana—is an invitational event open to all Southern California Council of Sports Car Clubs and is specifically designed to test the driving skill and car maneuverability of all contestants.

Starting flag will drop at 8:00 a.m. in the El Camino College parking lot—Crenshaw and Redondo Beach Boulevards—and the contest is expected to continue through most of the day.

Northrop club members will not participate but will act as hosts and officials for the trials.

The event is expected to draw from 200 to 300 entries with all types of sports cars competing. Already such clubs as the Thunderbird Foreign Car Club of Pomona, and the Austin Healey Owners Club have indicated their intentions to participate.

Other clubs scheduled for the event include the Radioplane Sports Car club, the Convair (San Diego) club, Manhattan Beach Sports Car Club, the Anaheim club, the Orange County Sports Car Club and others.

Spectators receive a special treat at this type of event because the cars are confined to a comparatively small area and the action is continuous.

The NRC has arranged to have Snack-mobiles in the area for those who wish refreshments and a sound truck will be available for broadcasting rally results.

Trophies will be awarded winners in all classes.

Links-Time Breakfast is Golfer Sked

Add a sunny Sunday morning to a hearty breakfast plus smooth greens and the total becomes a golfer's delight.

Barring unforeseen interference from Mother Nature, Northrop golfers with established NRC handicaps are invited to join this happy combination at the annual NRC Breakfast Tournament to be held Sunday, April 29.

Breakfast (scrambled eggs, hot cakes, ham, and trimmings) will be served from 8:00 to 9:30 a.m. Tee time is scheduled from 10:30 a.m. to 1:30 p.m.—first come first served.

A special putting contest slated from 8:30 to 10:30 a.m. will net trophies for the three best putters. NRC and merchandise prizes will go for low gross and low net in all flights.

Entry deadline is Friday, April 20. Tariff includes a $2 fee for breakfast, $3.00 greens fee, and 50c for the prize fund—total $5.50 to be submitted with entry.

Blanks available at Personnel Activity offices, Plants I and III.

Keglers To Compete In Huge Trial

The largest Spring tournament ever held is the claim being made for the forthcoming NRC bowling trials.

More than 400 contestants are expected to turn out for this fourth annual event. Games will be rolled at the Windsor bowl on April 21, 22, 28, and 29.

Although entries for the Spring tourney are now closed, Summer leagues are in formative process and entry blanks for these leagues are available at Personnel Activities offices.

Day leagues will bowl at Imperial, Windsor, Inglewood, and Paradise alleys. Night shift leagues will compete at Vermont bowl.

NRA Training Benefit To Junior Hunter Clan

A solemn note for parents with young hunters in the family is this recent accident trend note published in the National Rifle Association uniform hunter casualty report.

". . . the age factor is changing to place more responsibility for accidents on the younger hunter. In 1950 thirty-four per cent of all shooters responsible for hunting casualties were under 20 years of age. In 1954 this percentage had risen to forty-three."

Under California law, all persons under 16 who have not previously been licensed to hunt must possess a certificate of competence in safe gun handling before they can obtain a license. Approximately 4,500 qualified National Rifle Association instructors are currently donating their time to give the required 4-hour safety course throughout the state.

Parents wanting information regarding Junior Hunter Safety classes are invited to contact any hunting license agent in their local area, according to a notice received from the Department of Fish and Game.

More than 33,000 junior hunters have been trained in firearms safety since the inception of the course and DFG statistics show that these juniors have proved to be 17 times as safe as other junior hunters.

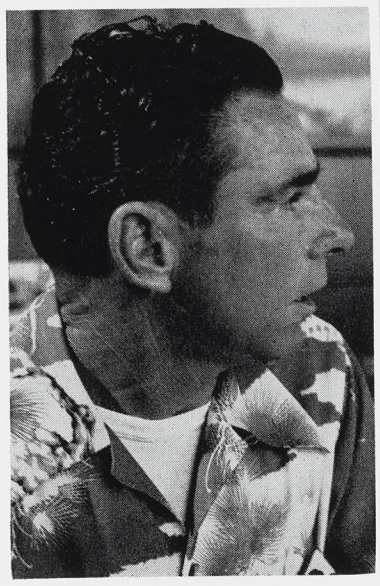
Dance Ducats

Those Norcrafters who prefer to trip the light fantastic at discount rates are all set up for a busy April.

On Saturday, April 21, at the Aragon Ballroom, Lawrence Welk will favor dancers with his "Champagne Music" and all Norcrafters and friends may attend this event at special rates.

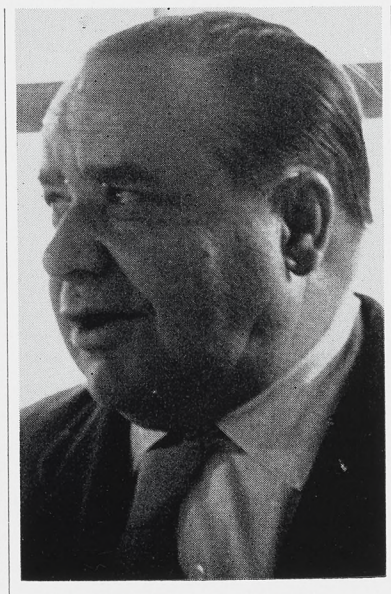
The mambo king, Perez Prado, will beat out his special brand of rhythm for Norcrafters on the following Saturday, April 28, at the Hollywood Palladium.

Discount ducats for these features are available at the Personnel Activities offices, all plants and facilities.

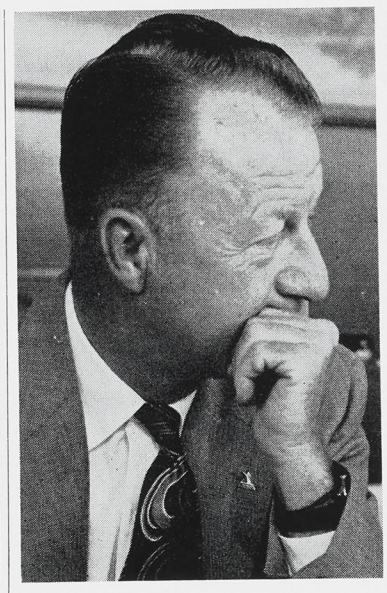


AMAZEMENT — Bob Hannum receives Boner Award — dubious honor.

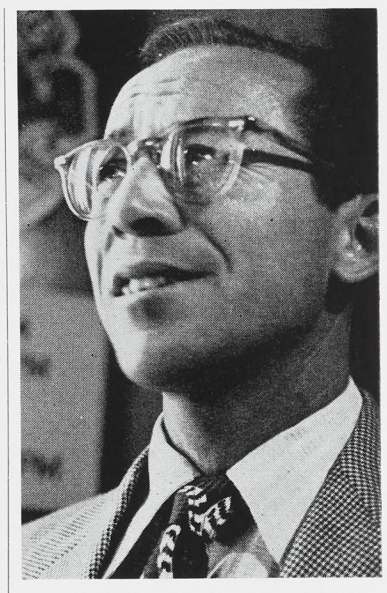
ANGER—Ex-boxer Matt Kinney shows opinion in fight manager discussion.



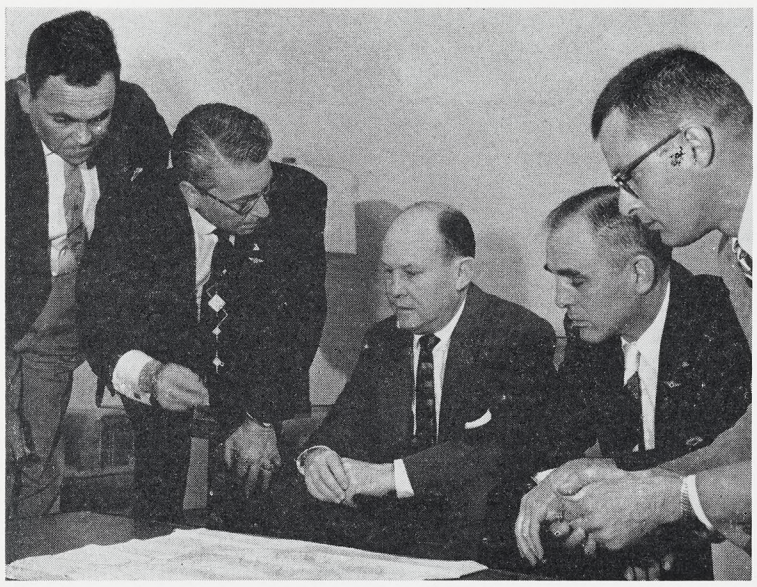
INTEREST — Marriage finds Art Griese attention-sharp, know-how ready.



BOREDOM — Topic of Navy mops, buckets finds Carl Liedtke draft wary.



PAIN — Worth 1000 words. Here is Bill Cox's opinion of women drivers.



The "See" in CD

EYES FOR DEFENSE—Important addition to Southern California Ground Observer Corps facilities is newly established post located atop Hermosa Biltmore hotel. Here Norcrafter GOC officials discuss post with John R. Alison, vice-president, Customer Relations. Pictured, left: Carl Brinke, Jack Baugh, Alison, John McKellar, Jack Badour. Baugh is South Bay area chief observer, others are all assistant chief observers. Observers are urgently needed, says Baugh; volunteers should contact Civil Defense directors in area.

PARENTAL PRIDE—Assistant Chief Engineer and Mrs. George F. Douglas smile approval at daughter Karen, who is one of four girls chosen from California to attend All-States Encampment of National Girl Scouts of America at Buffalo Bill Scout Camp, Cody, Wyoming, in August. Karen is Mariner from ship Night Witch. National council chose girls.

Charm Marks Birthday

FIRST THINGS FIRST—Anaheim ladies prepared for series of events commemorating Anaheim division's fifth anniversary with highly successful fashion show at Disneyland Hotel. Anaheim models shown, seated: Shirley Matson. Standing, left: Ila Brock, Dorothy Peringer, Pat McLaughlin, Ardis Adams. Anniversary celebrations were held all last week, ended with festive Open House Sunday.

PHOTO FEATURE:

Northrop News Pictorial

WHEN USS WASP hosted aircraft industry officials recently, Marine Transport Squadron HMR-361 dispatched helicopters to pick up group from Northrop Field. Included in group: Lieutenant Bob Austin; Whitley C. Collins, Northrop president; Hall Hibbard, of Lockheed; Lee Atwood, of North American; and F. W. Conant, of Douglas. Aboard Wasp visitors watched pilot carrier qualification.

Wasp Via Whirlybird

PRE-TAKEOFF VIEW shows Commander M. J. Ball, of office of BuAer General Representative, Western District; Dr. C. B. Millikan, Caltech; and Northrop Vice-president Robert R. Miller, Administration. Precision formation of helicopters impressed all who saw it.

For Smashed Record

RECORD BREAKERS—Presentation of Scorpion model to Colonel George F. Ceuleers and Major Robert M. Bell, commanders of Portland's 337th Fighter Group (AD) and 460th FIS, respectively, by Northrop's J. J. Quinn commemorates smashing 394-hit score rung up by 460th in recent rocket firing program. Squadron broke its own record of 270 hits scored last year —a score which had not been approached by any other F-89 or F-94 squadron in rocket training.

Timely $1000 Idea Award Presented to Norcrafter

Air Materiel Chief

DURING RECENT VISIT to West Coast, General Edwin E. Rawlings, commanding general, Air Materiel Command, paid call on Northrop President Whitley C. Collins. They are shown discussing Alaskan Air Command bases where F-89 Scorpions hold outer continental defense line.

Salvage Tour Points Need To Conserve

Salvage — lumber, hydraulic fittings, aircraft hardware, cutters, A/N parts, valves, nipples, unions, gauges, swagers, electronic parts, Clecos, bees' wax and more—was on Mat Con parade last week for lead Norcrafters.

The parade was actually in reverse. Lead personnel were taken on night and day 30-minute tours of the Salvage area via the offices of Material Conservation. Over 1000 persons were scheduled to visit the display.

Previously, supervision tours were conducted. Beginning this week, key personnel in operating

(See Salvage Tour, page 3)

JOHN SAKALIS HITS JACKPOT

John Sakalis' tenth wedding anniversary this month won't be forgotten by either John or his wife for a long, long time.

For on the eve of this pleasant milestone John presented the Mrs. with $250 an hour (minus federal income tax)—the $1000 Suggestion Award he'd received that day in the office of Vice-president Kenneth P. Bowen.

Sakalis joined a select group of Norcrafters when his idea earned the maximum award. Only four $1000 checks had been presented before: to Mel Bates, Ray Chapman, Tom Polliard and Lee Matthews.

"I gave her one $250 check at six o'clock," John said; "another at seven, the third at eight, and the remainder at nine!"

Sakalis is a leadman in Missile Installation and Final Assembly (5621), the same department in which he started his Northrop career in November, 1952.

(See Timely Cash, page 2)

New Catalina Clubhouse For Use of All Personnel

For those Norcrafters who have always wanted an island retreat—their wishes are granted.

The NRC has recently signed a lease for rental of a cabin on the Catalina Island Isthmus for the use of NRC clubs and Norcrafter departmental groups on holiday outings. The building is now known as the Catalina Clubhouse.

The cabin, similar to a rough mountain cabin, is located on a hillside overlooking the Isthmus bay (see pictures on page 3, this issue). Camp sites are located nearby and the new clubhouse lends itself ideally to camp headquarters for large groups.

Housing consists of one large room and a kitchen—shower and toilet facilities are located in an adjacent building. Norcrafters are advised that sleeping bags and cots are necessary—there are no sleeping facilities available in the cabin.

It is also recommended that visitors to the new clubhouse take their own food. There are stores on the Isthmus but stocks

(See Catalina, page 3)

Northrop News

NORTHROP ®

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, April 25, 1956

Photo Panels Help Speed F-89 Electrical Checkout

Increasing use is being made in the plant of an electrical continuity check fixture developed by Department 5515, with yeoman assistance from the Photo Lab.

First used on F-89H airplanes, the check makes use of a photo panel jig board for electrical assemblies. Back-wired, the panel hooks up with a DIT-MCO test fixture to make a complete checkout of F-89H electrical harnesses.

Although the photo panel is not an entirely unique development, the process of making a four- by sixteen-foot panel—which is, in the final product, essentially one large photograph on plywood—represented a technical triumph for Photo Lab.

Actual harnesses were photographed skillfully by Photo Lab photographers using a template camera, with great care taken to see that distortion was kept to absolute minimum. Four negatives were stripped together to make the two 4 x 8 boards, which fit end-to-end to make the complete panel.

Electrical sub-assembly Norcrafters follow the photograph in making up the electrical harness.

By backwiring the panel, Production Mock-up and Quick Fix personnel made it possible to hook up the DIT-MCO test fixture to check out the entire assembly before installation.

Nationally Vital Post To Weiss

Re-appointment of Herbert K. Weiss, chief of Weapon System Analysis, to a vital defense activity has been recently announced. For the third straight year Weiss was named to the National Technical Advisory Panel on Ordnance of the Department of Defense.

Appointment was made by C. C. Furnas, Assistant Secretary of Defense for research and development.

Fields of study covered by the panel include molecular explosives, solid propellants, free flight rockets and projectiles, among others. In addition to this panel position, Weiss serves as Northrop-sponsored consultant on the Defense Department's Weapon Systems Advisory Group.

BBSF OVERFLOWS ITS BOUNDARIES

Extremely heavy supply of classified advertisements submitted by Norcrafters for this issue has overtaxed the available BBSF space and a substantial number could not be included.

Norcrafters who submitted ads prior to deadline, and do not find them published, may re-submit the material for publication next issue.

BBSF deadline remains the same—Wednesday noon, one week before publication. Use ad forms 59-308 available in the Northrop News office, from department clerks, Personnel Activities offices, and in all plant lobbies.

WINTER WORLD of Alaska—and Elmendorf AFB—lies beneath the F-89D shown streaking through a leaden sky. Snow and the totem pole add atmosphere, the pole a symbol of age contrasting with swift sky-borne products of today's industry.

Test Air Hours: 1000!

TO ROL OWENS, assistant chief of flight at Northrop-Palmdale, it was just another Scorpion test flight on Friday, March 23. Not so to Rol's buddies in Flight Test who gathered on the ground. Taxiing back off the strip after the flight, Owens found a quiet but excited little crowd awaiting him. It was a surprise party in honor of Rol Owens' 1000th hour of test-flying the big interceptors. Surprised and embarrassed was Rol; happy were his Palmdale-Hawthorne friends. L-R — Ray Tenhoff, Owens, Lew Nelson, Max Stanley, Jim Bugbee, Jack Farley.

LATER, inside Northrop cafeteria, it was steak for Rol with wife Carolyn, son Greg—Flight department hosting. Backs to camera—Northrop Director of Flight Max Stanley, left, and Base Administrator Tom McCracken. Rol was presented desk set, plus various "hero" medals by friends, many of whom are not shown in these photos. Don Foreman, Palmdale flight tower, took candid shots.

Engineers Plan Leap Year Dance

"Music hath charms . . .," so the saying goes, and the girls in the Engineering division found this to be timely information. Hence, the forthcoming Engineering Leap Year Dance.

The tender trap is scheduled for Saturday, May 5, at the Dixie Manor, 4267 South Western. Clare Wells and orchestra will provide the music that charms following the cocktail hour which starts at 8:30 p.m.

Ducats, available in each section and department, are $1.25 per person. Everyone is invited.

Dance committee ladies—Anne McCormack, Margaret Chapman and Julie Elliott—are being aided in their endeavors by Committee Chairman Don Sargent, Al Rathbun, Jim Poole and George Paterson.

LITTLE RESISTANCE is expected from those males invited to Engineering Leap Year dance on May 5 by ladies pictured, top left, clockwise: Anne Cude, Liaison Engineering; June Stringer, Guidance Engineering; Mary Ellen Doherty, Engineering Administration; Judie Pavao, Engineering Personnel. (See details in story at left of photo.)

Timely Cash

(Continued from page 1)

About two years after he started, he noticed that personnel were having difficulties with the "pigtails" on electrical plugs (pigtails are the braided metal coverings peeled back from the individual wires when the latter are connected to the plugs).

Common practice was to solder the pigtails together, two by two, until a single ground was produced. The practice was time-consuming, did not provide the best quality possible with respect to shorts, and detracted from a neat appearance.

Sakalis' suggestion was relatively simple: bring all the pigtails to a point and solder them together, with a single ground projecting.

The job is a small one, and the savings in time amounted to only five minutes per plug. But there are 600 plugs per F-89 alone—not to mention the missile, where the process is also applicable!

The net result: savings that merited the award of the maximum amount permissible under the Suggestion Award Plan.

Close investigation of the suggested process preceded the award, with hearty concurrence in savings estimates from all hands. The new operation has been incorporated in the Process Manual.

Alaska Airman

INGENUITY AND INITIATIVE won Technical Sergeant Earl A. Sedell, 66th Fighter Interceptor Squadron, Alaskan Airman of Month honor for February. Brigadier General J. H. Davies, deputy commander, AAC, presented F-89 model to Sedell as token of the honor at special ceremonies attended by two flights of the 66th squadron.

MARIPOSA TOASTMASTER FOLK TO EDUCATE FOR ROSTRUM IN 1956-57

Top education in speech craft is the theme adopted for the coming year by the Mariposa Speakers' Club — Toastmasters No. 1050.

New officers for the club installed at a formal ceremony at Miller's Restaurant, Inglewood, on April 6, were: Jerry Chrysong, president; Tom Schott, educational vice-president; Stan Suter, administrative vice-president; Hugh Benson, secretary; Hal Ivers, treasurer, and Larry Littrell, sergeant at arms.

Matthew English, Department of Freeways, State Highway Commission, acted as master of ceremonies for the event.

The club, chartered in October, 1955, extends an invitation to new members. Meetings are held every Thursday evening at 6 at Miller's Restaurant.

A special Armed Forces Day program will feature military dignitaries from all branches of the service as honored guests.

DOUBLE HONORS IN TRAFFIC TO BILL ZUETELL

Twin honors in the transportation field have been bestowed by election on William "Bill" Zuetell, Northrop traffic manager.

In the Aircraft Industries Association Western Regional Traffic Committee, Bill has been elected to chairman of the Rate and Classification group.

Earlier, in an election held in Chicago, Zuetell was named director of the Terminal Freight Cooperative Association, a group of shippers including Northrop.

One of the primary purposes of TFCA is to consolidate less than carload shipments into carloads to gain favorable carload shipping rates on small cargoes. Convair, Boeing, and North American Aviation are among other members of the organization.

SAFE BARGAIN

By special arrangement with a safety equipment company, Norcrafters may purchase automobile seat belts through the Personnel Activities Offices at special discount. Paid orders are now being taken in all PA offices.

The belts, available in 11 different colors, are priced at $4.50 plus tax for automobiles, $5.50 plus tax for sports cars. A one-week delivery period is required.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 17

Published every other Wednesday
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
Permission to republish material with credit to the Northrop News will be granted.
News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

"Going My Way" forms are available from department clerks at all Northrop facilities, including Anaheim; Personnel Activities offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

Rides Wanted

RIDES OFFERED

7:30 a.m. — 4:15 p.m.

(Zone 1)
FOOTHILL BLVD. & RAMSDELL AVE., La Crescenta. (Can pick up in La Crescenta, Montrose, La Canada, and east portion of Glendale; will deliver at Plant 1, 2 or 3.) MELVIN L. DUNBAR (5700-31869, Ext. 2053). CH 9-6305. 13-1

(Zone 4)
FIRESTONE & OTIS, South Gate (West on Manchester or Century, South to Plant 1 or Plant 3.) M. BROWN (9350-27999, Ext. 1810). LU 5-3067. 13-4

(Zone 5)
GARDEN GROVE (Rosecrans to Santa Ana Freeway, pick up along way.) ROBERT CLOYD (5531-42648, Ext. 151). OS 5-4611. 13-5

MILLER AND LA PALMA OR MILLER AND ORANGETHORPE, Buena Park. (Orangethorpe to Atlantic, Atlantic to Artesia, Artesia to Plant.) BEN LOVERIN (8100-32252, Ext. 1518, 1519). JA 7-4378. 13-5

(Zone 9)
PRAIRIE & 174TH ST. (Will pick up riders on Prairie anywhere between 174th St. and Northrop.) GINGER MARSH (4310-14002, Ext. 2195). 13-9

(Zone 10)
HERMOSA AVE. & 19TH, Hermosa Beach. (Via Gould Lane, Redondo Beach Blvd., Prairie.) R. E. BOWMAN (4240-31320, Ext. 1985). FR 2-1236. 13-10

3:45 p.m. — 12:15 a.m.

(Zone 5)
BUENA PARK AREA, Buena Park. (Route: Rosecrans, Olive, Artesia, on South St.) E. K. HEDGES (5520-20550, Ext. 1233).

4:45 p.m. — 1:15 a.m.

(Zone 3)
AZUSA AREA. (Want two in car pool from Azusa or Puente.) ANNE UNKS (5583-23566, Ext. 1292, ED 7-8918

(Zone 14)
BEVERLY & FAIRFAX, Los Angeles 36. (Will pick up along La Brea south of Beverly Blvd.) P. FRIZLER (5509-19953, Ext. 2075), WE 9-1578. 18-14

Miscellaneous—Split Shift

(Zone 9)
PALOS VERDES DRIVE NORTH & CRENSHAW, Rolling Hills. (Come straight up Crenshaw Blvd. to Broadway, then to Plant 1.) Hours: 7:45 a.m. to 4:30 p.m. MARGE WALKER (8210-14187, Ext. 557). FR 7-1732. 20-9

7:00 a.m. — 3:45 p.m.

(Zone 8)
CRENSHAW & REDONDO BEACH BLVD., Torrance. F. T. HAMEL (5231-44171, Ext. 2171). 2-8

(Zone 10)
RINDGE OR VAIL, No. Redondo Beach. (Ride or car pool, gate 3.) MARIAN WALTER (5512-16127, Ext. 2550, 1813). FR 4-2190. 2-10

(Zone 13)
OVERLAND & NATIONAL, Los Angeles 34. LOUIS H. ELSMAN (7520-44174, Ext. 625), VE 9-0455. 2-13

(Zone 14)
HOLLYWOOD & VINE, Hollywood. ROBERT A. DAVIS (5510-21844, Ext. 2255). HO 4-7884. 2-14

7:30 a.m. — 4:15 p.m.

(Zone 1)
CENTURY AND CRENSHAW, Inglewood. JEANETTE COOLEY (1422-14462, Ext. 696). OR 1-3648. 3-1

(Zone 5)
WESTERN & EL SEGUNDO, Gardena. (Live in Hollypark Tract. Especially desire ride in the morning.) DONNA SCAMAHORN (3120-44012, Ext. 464 or 2410) DA 9-2013. 3-5

(Zone 9)
CARSON & ANZA, Torrance. (Southwood Homes Tract.) ANN OLIVIERI (3120-11999, Ext. 1559). FR 9-3772. 3-9

HAWTHORNE BLVD. & 162ND, Lawndale. (Person will have to be working at Plant 3.) J. F. BOWEN (7520-14242, Ext. 625). 3-9

CAMINO DE LAS COLINAS & CALLE MIRAMAR, Redondo Beach. (Will pay for ride with reliable driver. Can drive on occasions if necessary. Will consider 3 party car pool.) HOWARD F. DOSTAL (3360-33886, Ext. 1506, 1889). FR 5-5204. 3-9

(Zone 10)
ROSECRANS AND SEPULVEDA, Manhattan Beach. LEONARD SMITH (8100-15547, Ext. 2771). FR 2-4759. 3-10

ROSECRANS AND SEPULVEDA, Manhattan Beach. GLORIA CRONIN (5128-43590, Ext. 1316). FR 4-0733. 3-10

(Zone 11)
MAIN & IMPERIAL or Eucalyptus & Imperial, El Segundo. VIOLA R. SMART (3142-40426, Ext. 2021, 2022). 3-11

(Zone 12)
FREEMAN & 103RD or 104TH, Inglewood. ILA M. PATTERSON (5260-26431, Ext. 683, 1766, 1767). OR 4-4032 3-12

(Zone 13)
FIRMONA & 111TH, Lennox. JUDITH ANDERSON (3313-42869, Ext. 1962 or 1984). 3-13

RIDES WANTED

3:45 p.m. — 12:15 a.m.

(Zone 13)
SEPULVEDA AND CENTINELA OR SEPULVEDA & SAWTELLE, Culver City. (Want ride to work only 3:45 or 4:15 p.m.) GINGER ARKILL (5538-21580, Ext. 525 or 2185). EX 8-4007. 6-13

4:45 p.m. — 1:15 a.m.

(Zone 1)
MAGNOLIA & 11TH, Los Angeles. (1 block south of Olympic, 2 blocks north of Pico, 3 blocks east of Vermont.) CLEO MORRISON (5507-19285, Ext. 526). DU 3-7753. 8-1

(Zone 3)
AZUSA AREA. (Want two in car pool from Azusa or Puente.) ANNE UNKS (5583-23566, Ext. 1292). ED 7-8918. 8-3

(Zone 5)
ROSECRANS & LONG BEACH BLVD., Lynwood. (2 blocks west of Sears'.) CLARENCE FORMANECK, (5353-18615, Ext. 1385). NE 1-7508. 8-5

(Zone 12)
LENNOX & FREEMAN, Inglewood. PAT UZDAVINIS (5340-37975, Ext. 1975), OR 7-5547. 8-12

Miscellaneous (Split Shifts)

(Zone 2)
VERMONT & 51ST ST., Los Angeles. (Hours: 4:15 p.m. to 12:45 a.m.) GLORIANNE JONES (9330-41955, Ext. 2228), PL 9-7498. 10-2

(Zone 4)
OLD RIVER SCHOOL ROAD & FIRESTONE, Downey. (Hours: 4:15 to 12:45 a.m.) MORGAN H. CHADWICK (5530-43793, Ext. 1420, 1379). TO 9-9994.

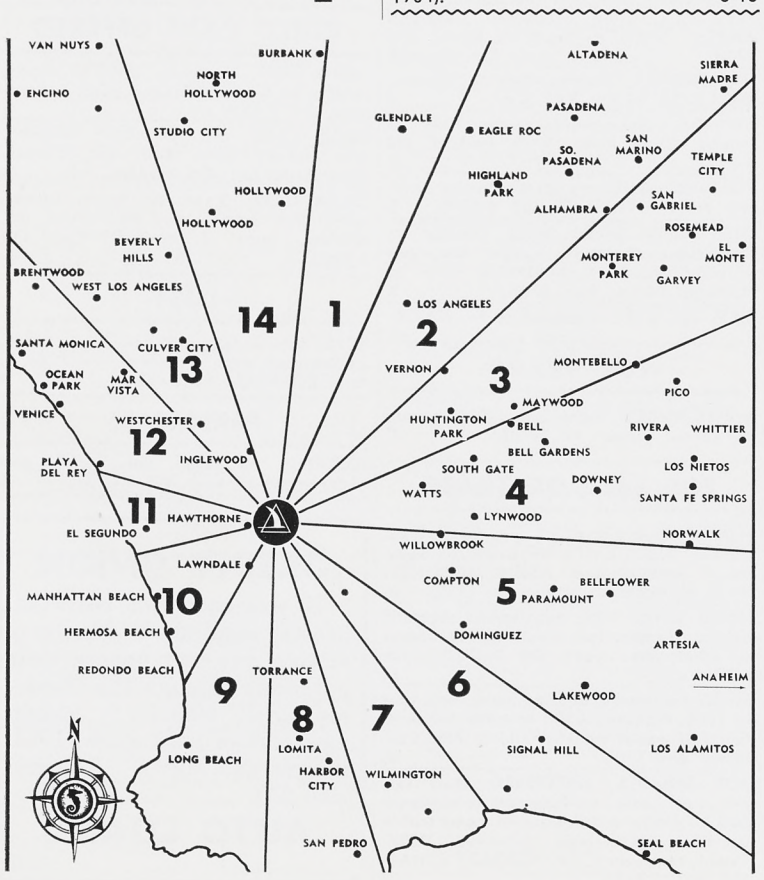
(Zone 5)
CRENSHAW & EL SEGUNDO BLVD. to Maple Ave. Facility, Hawthorne. (Hours: 6:45 a.m. to 3:30 p.m.) RAYMOND A. BERKLEY (5930-33759, Ext. 3-231), OR 4-3577. 10-5

(Zone 13)
ARBOR VITAE & INGLEWOOD AVE., Inglewood. (Hours: 4:15 p.m. to 12:45 a.m.) JOANA S. ADAMS (4110-39204, Ext. 2331). 10-13

ARBOR VITAE & FREEMAN BLVD., Inglewood. (Hours: 4:15 p.m. to 12:45 a.m.) MARY LOU DORN (4110-33339, Ext. 2331), OR 4-2196. 10-13

(Zone 14)
WEST BLVD. & 67TH STREET, Inglewood. (Mariposa. Hours: 7:15 a.m. to 4:15 p.m.) MAXINE BURDICK (6001-44147, Ext. 401). 10-14

Zone Map



Catalina . . .

(Continued from Page 1)

are sometimes low.

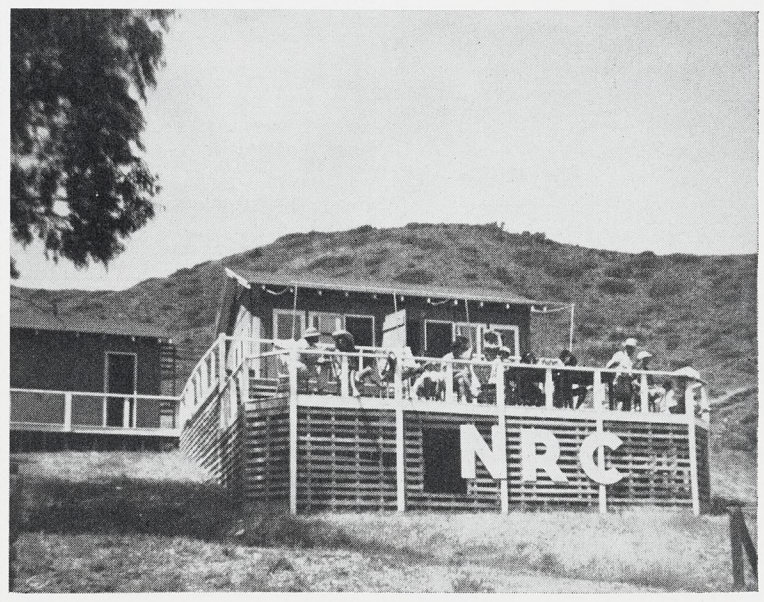
Reservations for use of the Catalina Clubhouse will be taken at Personnel Activities, Plants I and III, and by Personnel Activities representatives in outlying facilities.

Groups will be limited to fifty people—according to the terms of the lease—and, in fairness to all, priority will be given to NRC clubs and large groups of Norcrafters. However, all reservations are final. There is no charge for use of the new clubhouse but all visitors are requested to leave the buildings in top condition.

Transportation to the Isthmus is available via the Catalina steamer to Avalon and then by water taxi to the Isthmus.

Personnel Activities has details on mooring for private boats and will assist Norcrafters in making up groups and in arranging transportation.

ISLAND RETREAT—. Newest addition to NRC clubhouse facilities is cabin on Catalina Island Isthmus. Clubhouse is pictured front and center—from back. New facility is available to all NRC clubs and Norcrafter groups for holiday outings. Reservation, transportation, and mooring information available in PA office.



EARLY BIRDS—. Among first clubs to use new Catalina Clubhouse is NRC Boat Club—group pictured here. Clubhouse and Isthmus pix are courtesy of BC members. Island retreat is similar to mountain cabin, requires camping equipment, provides cooking, shower, facilities.

Salvage Tour Points Need

(Continued from Page 1)

departments, including Manufacturing, Purchasing, Engineering, Quality Control, will review the stocks of material that are undergoing salvage, reclamation, or surplus action.

"Up - stream" conservation is the name applied to this latest Mat Con program, a program designed to apply action measures at the source as well as the end product on the end of the line . . .

The exhibit categories are:

Sorting Room — where reclamation "in the raw" is always under way. Here floor sweepings, hardware, fittings, and the like are sorted, analyzed and stocked. Nuts are matched to bolts, metals segregated, parts are binned, with some of the material returning to the factory for airborne usage after proper inspection procedure.

Tooling—here a display prepared by Standard Tooling shows such items as cutters, Huck lockbolt guns, electric drill motors, all routed to Conservation after suffering avoidable damage.

A/N Parts Crib—radio tubes, electronic equipment, actuating devices—all interesting food for conservation thought.

Disassembly Room Exhibit—here usable parts and materials are torn down for rebuilding. Cerro metal recovered from surplus jigs, Clecos, and the aforementioned bees' wax, plus many other parts, are shown.

Salvage Sorting Dock — by-products of manufacturing operations. Here scrap — steel, iron, aluminum, copper, and other ferrous and non-ferrous metals—already sorted by the originating departments, is stock-piled for sale to reducing companies and eventual return to industry.

At the different exhibit sections, "up - stream" conservation suggestions are given. At the end of the tour, Mat Con asks for additional ideas and provides forms for convenience.

The display will remain up until mid-May. Norcrafters who would like to see Mat Con in action at Salvage may check with their supervisors for further details.

BBSF CLASSIFIEDS

Barter, Buy, Sell or Free classified ad service is free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline — noon Wednesday one week before publication.

FOR SALE

GOLF CLUBS, $90 set, 4 Spalding woods, Top Flite, $45. E. J. HARVEY. Write to Northrop News, Box 1715. A

WASHER, wringer-type, timer, pump, $30. M. B. FORTSON, DA 9-5695. A

WASHING MACHINE, Thor, semi-automatic, $25. A. LASSOFF, OS 5-4345. A

FORD, 1949 2-door custom, overdrive, $395. G. T. STERLING, FR 6-1395. A

DASH, Stewart-Warner, stainless steel, 5 gages; MANIFOLD, dual intake, Offenhauser for '37-'51 Chevrolet; TRACTOR, converted from 1922 Dodge, $75. BILL WILLIAMS, OS 6-8860. A

FURNITURE, dining room, living room, two bedrooms, stove, refrigerator, carpet, curtains, lamps, equity free, take over payments $35 month, all like new. Write to Northrop News, Box 1708. A

RADIATOR, combination gas-steam, $35. W. W. KELLY, PL 4-9637. A

AUTOMATIC WASHER, Kenmore, round type, suds saver, $50. HENRY M. KARASEWSKI, PL 9-6716.

FREEZER, 20 cu. ft., cost $500, $150, used 1 year. W. A. DAVIS, FR 4-8836.

LIVING ROOM SET, beige; 2 END TABLES; COFFEE TABLE, fair condition, $80 or sell separately. A. S. KOLAYA, CI 3-3048. A

MATERNITY CLOTHES, size 10 and 12, assortment, reasonable. GRACE L. STURGILL, OR 2-6360. A

WHEEL CHAIR, reasonable. F. G. NICOLAY, TE 0-5139. A

PUPPY, Weimaraner, 6 months old female, AKC reg., $50. OXford 6-8900. A

RELAXICIZOR, portable. B. E. RUNSWICK, RI 9-2700. A

BIKE, Schwinn Black Phantom, 28", cost $90, $25. TOpaz 2-1291, between 6 and 9 p.m. A

BICYCLE, boy's Elgin, $10; Craftsman PIPE STOCK (self-centering), 5 dies, $10; GAS HEATER, Gaffers & Sattler, 12,000 b.t.u., $2.50. PHIL REEDER, PL 2-6064.

RABBIT CAGES, four, all wire, double feeders, $10. OS 6-0721, after 4 p.m.

HOUSE, 3 bedrooms and den, 3 miles from Plant, 1¾ baths, w/w carpeting, Swedish fireplace, 2 car garage, $17,000. L. W. SMELSER, DA 9-5579. A

WRIST WATCH, man's Rollex, solid gold case, cost $300, $200. HARRY D. PARKER, JR., TH 8-8187. A

RIFLES, 8 mm. Mauser sporting, $90; .30-06 U. S. Enfield sporter, $60. Write to Northrop News, Box 1705. A

HOUSE AND LOTS, two 50'x133' lots, 1-bedroom stucco, about 6 years old, hilltop, sleeping room in basement, shade trees, near ocean, Manhattan Beach, $10,500, FR 4-5164. A

BABY FURNITURE, crib and mattress, $35; high chair, $15; baby wardrobe, $17. MRS. BRUCE GARDNER, DA 4-4569. A

HOUSE TRAILER, 1953 Badger, 27', double beds, heater, cooler, TV, stove, refrigerator, $2500. BLAIR, TE 2-4050. A

MICROPHONE, 50K OHM Micro-Dynamic, stand, cable, $25; COOLER, portable Coca-Cola, $5; SHAVER, Sunbeam electric Shavemaster, $10. LEO A. LABRIE, FA 8-1848. A

MOTORCYCLE, '53 B.S.A. twin Golden Flash, $350; blonde desk Necchi SEWING MACHINE, $275; TRUCK MOTOR, Chevrolet, 1955 6 cyl. Loadmaster high torque, head, pan, $175 cash. O. ANDERSON. Write to Northrop News, Box 1703. A

HOUSE, 4-bedroom, 1¾ baths, dishwasher, garbage disposal, fenced, North Torrance, $14,700 full price. DA 9-7353, before 3 p.m. or after 6 p.m. A

VENETIAN BLINDS, one 39x49, one 63x62, two 33x62, two 18x74, one 39x74, metal type. OR 2-4920. A

MOTORCYCLE, 1951 BSA. $295. HELEN WHITE, OR 2-7074. A

PING PONG TABLE, two-piece, folding legs, 5/8" top. R. W. CROMPTON. Write to Northrop News, Box 1704. A

FISHING DORY, 19', 4 cyl. engine, all Coast Guard approved equipment, $600. V. A. HODGE, DA 4-9661, mornings. A

SEWING MACHINE, Singer, rotary electric, $35; Kirby VACUUM CLEANER, all attachments, floor polisher, $50; large CLUB CHAIR, $25. R. H. HANTZ, OS 6-0913. A

VIOLIN, Ernst Heinrich Roth copy of Guarnerius, $125. M. E. SHEPHARD, PL 2-9891. A

BOAT, 16' runabout inboard, 1937 Ford engine, trailer, $600. A. E. ANDERSON, OS 6-4920. A

CORNER CABINET, painted white, open front, 7' high. A. H. MANN, VE 8-2988.

HAND SAW, electric, Craftsman, 8", with track, $40. R. A. BROSE, OR 2-0017. A

DESERT LAND, 75 acres, 16 miles northeast of Lucerne Valley; PLATFORM ROCKER, $10; 15 gal. HOT WATER TANK, $5; 20" WASHBASIN, 30" SINK, $5. B. E. GENTRY, OS 6-2113. A

HI FI MICROPHONE, Electro-Voice model 630, desk stand 18' cable, $22. L. L. BALSAM, GR 8-4784. A

FOR SALE

MOTOR SCOOTER, Cushman Eagle; Whizzer MOTOR BIKE, both need minor repairs, make offer. W. A. SHARP, PL 5-3045. A

FLOOR LOOM, 4 harness 38" reed; WARPING REEL, 30 yards; BICYCLE, boy's 20" Schwinn. ARTHUR D. ALLEN, DA 6-6808. A

HOUSE, 5-room, completely furnished, will sell together or separate, near Inglewood. PL 3-0650. A

HOUSE, 3-bedroom, corner lot, near shopping center, school, $68.74 month includes principal, interest, taxes, insurance, $970 down. DA 3-1431. A

8" TABLE SAW, ½ h.p. motor, $38. C. G. CURRY, OS 6-6956. A

BED DIVAN, matching club CHAIR, $65. OR 8-4170. A

KITTENS, Siamese, Seal Point, can be taken at 6 weeks old, or by May 11, $15 each. WILLIAM MYERSON, OS 5-1207. A

ADMIRAL console, 21" $100; WASHING MACHINE, wringer, Kenmore, $25. GRACE N. WEIKAL, OR 2-0617. A

FURNITURE, near new, complete 3 rooms plus odds and ends, reasonable. DA 9-4929, between 10 a.m. and 3:30 p.m.

MOTORCYCLE, Harley-Davidson 45, $150. C. R. HAMILTON, PL 5-0786. A

SECTIONAL, two-piece, aqua green, $40. Write to Northrop News, Box 1710. A

FREEZER, 22' upright Carrier, cost $685, $200. FRANK DEMBOWSKI, JR., OS 5-2858. A

REFRIGERATOR, Coldspot, $45. H. W. AILEN, OS 6-8842. A

TRANSCEIVERS, TBY-1 and TBY-2, complete; broadcast band ARC-5 RECEIVER; TAPE MACHINE, VM-700, $120; MAGNAVOX HI-FI, FM-AM, 3-speed auto. phono., $125. DONALD INGALLS, NO 3-3605. A

TIRES, Porsche, 1 never used, one tire rim, cost $200, $150. RON WEESNER, OR 2-1164, week ends. A

WASHING MACHINE, ABC, wringer-type, square tub, $50. D. J. PHILLIPS, TE 4-6409. A

CASH REGISTER, make offer. OS 6-2441. A

BICYCLES, girl's, two, $10 each; AVIARY, $10. HALBERG, OS 6-4555, after 4:30 p.m. week days.

BUREAU, mahogany, straight front, tilt mirror, $25. C. M. MILLER, OR 1-4814.

CYMBAL, 17" bop, $35; Sonotone HEARING AID, $35; DAVENPORT, $10. FR 2-9051. A

TRAILER, tear drop, butane stove, $200. OS 5-2265, evenings. A

WASHER, Kenmore, 1950 model, wringer type, $15. G. W. FISHER. Write to Northrop News, Box 1709. A

PIANO, upright, cherry wood, $75; DINETTE SET, blonde, Duncan-Phyfe, $30; CEDAR CHEST, $17. PL 2-4654. A

TONNEAU COVER, '51-'52 MG, plaid; SKI BOOTS, ladies' size 8. RUTH WALLACE, FR 9-8074. A

CAMERA, automatic Rolleiflex, f:3.5 Tessar, $75. JOHN MIYATA. AN 3-8534.

HOUSE, 2-bedroom, near school, Torrance, $8700. $650 down. WAYNE HUEY. Write to Northrop News, Box 1711. A

REFRIGERATOR, 7 cu. ft. Coldspot, $40; WASHER, Kenmore automatic, $40; LIVING ROOM SET, 2-piece, makes bed, $75; PIANO, grand, $300; KITCHEN TABLE, porcelain top, $12. LILLY T. BEST, PL 5-4459, after 5 p.m. or week ends.

MANIFOLD, Offie, 2 pot, $30; Fenton alum. RACING HEADS 8.5:1, $30, both for '49 Mercury; '49 Plymouth RADIATOR, $10; Gonset tri-band mobile CONVERTER for 75, 20, 10 meters, $20. FRANK R. FERREN, FR 9-4081. A

T. V., table model, 17" Silvertone, $40; TROMBONE, $20. RALPH PARKHURST. Write to Northrop News, Box 1719. A

END TABLES, two, glass top, $5 each. RAYMOND BOLAND, AX 2-4261. A

TV, RADIO-RECORD PLAYER, 21" Admiral, console, $125. S. B. HICKS, OS 6-1471. A

BREAKFAST NOOK, yellow bench, matching Formica topped table, w/appliance outlet. TOM CAMPBELL, FR 9-5152. A

DAVENPORT, matching CHAIR, apt. size, $45. DON JAYNE, PL 5-6659. A

BAND SAW, Craftsman, motor, stand, blades, $45. B. BINGE, FR 5-4358. A

RADIO, Packard Bell, automatic record player, $35. CHARLOTTE WOOLUMS, PL 3-7484. A

REVOLVER, .38 Special Colt, 6" barrel, holster, cleaning rod, 100 rounds ammo, $50. R. W. FRENCH, OR 4-5794.

SEWING MACHINES, two 400W Singer; Singer PLEATER with cams. W. B. MECHLING, Write to Northrop News, Box 1718. A

FOR SALE

STOVE, Enterprise, $20. B. L. NICHOL, EX 8-6172. A

CRACKER BOX, Wicken's built, inboard speedboat, fiber-glassed, V-drive, trailer, $1700. DA 9-6118. A

BOAT and TRAILER, 15', plywood, decked, 6' beam, 2½' freeboard, $250. M. R. GARRETT, OS 6-8290. A

ENGINES, $50; '52 Chevrolet Powerglide BLOCK, customized, $150. GEORGE BUISSON, OS 6-1852, 11 a.m. to 3 p.m.

VACUUM CLEANER, Kenmore, $10. OR 2-9206. A

RUG, hand-hooked, floral design, grey and tan, 10'x15', $100, terms; BED-SPRINGS, double size, $6; MATTRESS, inner-spring, double size, $15. JEAN F. BOWEN, FR 9-0432 (neighbor). A

GARDEN TRACTOR, 1.5 h.p. Bear Cat, all attachments, $200. FR 5-3110. A

MOTORCYCLE, Tiger-110, 6 months old, paid $930, can finance, $700. DON GULSERIAN, OS 5-6449. A

DINING ROOM SET, Early American, Georgian walnut, 8-piece, china cabinet, oblong table, $100, or table only, $40. C. T. CHRISTENSEN, DA 4-5086. A

SAW, Mall, $30; Hollywood type BEDROOM SET, $60; 3-bedroom HOUSE, attached garage, block wall, w/w carpeting, drapes, $11,500. K. E. UNDERWOOD, FR 9-4051. A

GASOLINE ENGINE, 1½ h.p., Briggs & Stratton, $35. FR 4-8317, after 5 p.m.

BICYCLE, boy's 26" Schwinn, chrome wheels, hand brakes, $45. OR 7-1248.

WASHER, Easy Spin-Drier, $35. C. W. NEWLAND, OR 7-5925. A

BAR, modern wrought iron, 3 stools, liquor dispenser and punch bowl set with bar, $70; modern DESK, blonde and black fox, $30; other FURNITURE. ALVIN J. TAYLOR, FR 9-2193. A

HAIR DRYER, beauty shop; AUTOMATIC TOASTER; WAFFLE IRON; ELECTRIC BROILER; electric VACUUM SWEEPER; CARPET SWEEPER; tenor GUITAR; MANDOLIN; VIOLIN; garage DOOR SPRINGS; Hollywood BEDFRAME. J. H. BUSH. Write to Northrop News, Box 1722. A

MOUNTAIN LOT near Crestline, on stream, chalet area of Club San Moritz, roads, water, power in, price includes club membership $1395. W. M. LANNING, OR 1-0289. A

PULLETS, 12 New Hampshire Red, triple A stock, OS 6-5253, week day only. A

AIR COMPRESSOR, 150 psi., 3 cu. in. flow, small storage tank, $10. R. A. HULME, FR 5-5604. A

WASHING MACHINE, G.E. wringer type, pump, timer, $60. KENNETH B. CRAIG, TE 2-2369. A

GERMAN SHEPHERD, male, 6 months old, AKC registered, $100. M. E. MILLSAP. Write to Northrop News, Box 1721. A

GAS STOVE, Gaffers table top, $50; Hotpoint ELECTRIC RANGE, $20; LAUNDRY TRAY, $10; baby CARBED and SEAT, $5; BUGGY, $10; SAFETY SERVER, $17; ELECTRIC ROASTER, $10. W. P. SOKOLOWSKI, FR 4-0014. A

OUTBOARD MOTOR, Mercury Mark 20, 1954. PAUL FLAMING, OS 6-1985. A

HOUSE, 3-bedroom, Lakewood, 2½ years old, rear living room, dining room, fenced, thermostatically controlled furnace, detached 2-car garage, $12,200, down payment $3100, payments $71.50 month. ME 3-6714. A

REFRIGERATOR, Sears Coldspot, 7 years old, $70. OR 1-4304. A

IRONER, mangle type, $15. L. L. LEWIS, FR 9-5229. A

HOUSE, Torrance, 3-bedroom, 2 baths, fenced, floor-to-ceiling Flagcrete fireplace, w/w carpeting, attached 2-car garage, $17,500 or offer, small down. E. L. WECKBAUGH, OS 6-0758. A

TV, 16" Emerson, $35; 30' ½" gas or water PIPE with fittings; 6' x 29" SCREEN DOOR; 2 SLIDING DOORS, 48" x 28"; WINDOW, 3' x 18". I. M. PATTERSON, OR 4-4032. A

CHEST OF DRAWERS, solid walnut Kroehler, 5 drawers, $35; walnut NIGHT STAND, $10. PL 4-8289. A

PIANO, upright, maple finish, $75 PAUL KOERSCHGEN, DA 9-1930. A

HOUSE, 2-bedroom stucco, 3 yrs old, R-4 lot, 50x187, 2-car garage, room to build; LENS for Leica, F1.4 50mm Nikkor, $95. PL 4-9549. A

MOTORCYCLES: 1953 Francis Barnett, 200cc, $200; Triumph Trophy, $350; G. E. TV 12½", $25. R. W. KING, GR 7-1937. A

HOUSE, 3-bedroom stucco, fence, patio, double garage, 2 yrs. old, $12,250, FHA or GI terms, Gardena. DA 9-7258. A

SOFA BED, $12; SOFA BED, $8; TV 10" R.C.A. 630, $35; walnut CHINA CHEST, $50; Zenith chairside RADIO, $15; fish SEINE 8'x100', $7; child's BICYCLE, 2 to 3 yr. size, $8. JOE HORKA, OS 5-4954. A

PIANO, baby-grand; CHAISE-LOUNGE, redwood pad; LAWN CHAIRS, metal; FLUORESCENT LIGHTS, industrial; JACK PLANE; white semi-gloss ENAMEL, $3; 1-gal. LINSEED OIL, $1.50; misc. PIPE and PIPE FITTINGS. R. CONNELY, OR 8-6548. A

FURNITURE, living room, couch, matching chair, mahogany step end tables, coffee table, lamps, two occasional chairs; 17" Zenith TV console, $65. JEANNE SILER, DA 9-6643. A

FOR SALE

HOUSE, 2-bedroom, den, stucco, Torrance, built in 1953, near school and market, $8950, $50 down and $25 weekly. TE 4-7305, 6 to 9 p.m. A

STOVE, Magic Chef, $50; German shorthaired POINTER, female, year old, papers. FR 5-0743. A

ORGAN, electric Hammond chord, walnut finish, $750. FR 2-7143 after 8 a.m. A

TABLE, Duncan Phyfe, 6 chairs, $40; medium size cherry upright PIANO, $90. AX 2-3903. A

BAND SAW, $19.95; electric BRAKE UNIT for house trailer, $15. M. G. WILLIAMS, OS 6-7390. A

LAND, 10 acres, walnut trees, Simi, $3750 acre, all or part; TRACTOR, Bearcat, 2½ hp, misc. attachments, $50. ED ACKERMAN, EM 1-5700. A

MARE, Palomino, man's horse, $100; SADDLE, Western, $70. J. W. STATLEY, Write to Northrop News, Box 1725. A

TV, 17" table model Emerson, $37.50. DENVER HOWARD, OS 5-5829. A

HI-FI Heathkit 20 watt amplifier preamp; Miraphon XM-110 3-speed manual RECORD PLAYER, G.E. mag. cartridge, Diamond, sapphire stylus. WAYNE ORMAN, PL 2-5304. A

CABIN CRUISER, 16' Chris Craft, Aerojet inboard engine, $1295. FR. 4-2190. A

KODAK Monitor F4.5 2¼x2¼, $40; Dejur ENLARGER 2¼x3¼, $85; ARGUS C-3 flash & case, $30; CEBE I flash bat. & elect., $39; WIRE RECORDER, 6 rolls wire, $45; Mansfield 16mm CAMERA F2.5, $37.50. B. HARMON, OR 1-4218. A

BED DIVAN, Simmons, red, $50. H. H. TIMMERMAN, FR 5-7210. A

DESK, mahogany, glass top, $35; ACCORDION, 120 bass, 4 switches, bank terms; 3-piece BEDROOM SET, innerspring mattress, $40. FRED AMMONS, DA 9-4515. A

ENCYCLOPEDIA, set New Standard, 3 mos. old, 14 vols., annual new edition for ten years, $150. RICHARD COWE, AX 3-2477. A

WANTED TO BUY

HORSE SHOES, standard set of 4, "pitching". Write to Northrop News, Box 1716. B

TRAILER, Allstate 1-wheel; TV ANTENNA, 20' or 25', will consider smaller, reasonable. POWELL. Write to Northrop News, Box 1714. B

DINING ROOM SET, modern, blonde, four or six chairs, consider china cabinet also, reasonable. C. M. LA TENDRESSE, FR 9-9278, evenings. B

HOUSE, 2-bedroom, Manhattan Beach. RUTH WALLACE, FR 9-8074. B

SEDAN, postwar, radio, heater, Hydra-Matic, $200. RAY BOARMAN, PL 5-0863.

WALLACE RECORDS, set, OS 6-2441. B

EXPOSURE METER, high quality, good condition. A. H. MANN, VE 8-2988. B

FORD, '50-'52 sedan, mechanical shift. FR 9-9629. B

LOT or HOUSE in Rolling Hills area. Write to Northrop News, Box 1706. B

CONCRETE MIXER, small size, ¼ h.p. electric motor. C. W. DRURY, PL 9-7449.

MOVIE EQUIPMENT, 8 mm. or 16 mm.; Latin-American PHONOGRAPH RECORDS; HI-FI combination record player-radio. PL 2-9582. B

WEAPONS CARRIER, army, 4 x 4, pay cash. AN 3-7620, 6 p.m. to 8 p.m. B

CHASSIS and RUNNING GEAR, 1934 to 1937 Dodge or Plymouth. OS 6-5253, week days, before 3 p.m. B

WEIGHTS, barbells and dumbbells, about 200 pounds. OR 2-4530. B

PLAY PEN, good condition. GINGER MARSH. Write to Northrop News, Box 1723. B

MOTORCYCLE, lightweight, or scooter. OR 1-7458, before 3:45 p.m. B

SWINGS, playground, heavy duty, 3 swings. Glide Ride. L. H. HATCH, OS 6-7122. B

WELDING UNIT, arc (prefer motor driven). M. G. WILLIAMS, OS 6-7390. B

OLD GUNS, prefer black powder or flint, rifles, shotguns, pistols, any type or condition. H. E. BARTROM. Write to Northrop News, Box 1726. B

BIKE, 20" girl's, reasonable. FA 8-3306.

FOR TRADE

WRIST WATCH, ladies', cost $550, trade for spinet piano. FR 2-9051. C

FOR SALE OR TRADE

HOUSE, 3-bedroom, 2 yr. old, West Covina, $1300 equity for $1000 or trade for ? equal value. JOHN MORONEY. Write to Northrop News, Box 1712. M

HAND LEVEL K&E, two scales, percent degree, graduation, trade for FM tuner or what have you? OR 8-6761, after 6:30 P.M. M

MARE, registered quarter horse, will foal in June, blooded, $500 or trade for anything of equal value. Write to Northrop News, Box 1702. M

BOX SPRINGS, MATTRESSES, two sets twin-size Sealy, on legs, all four pieces $60 or trade for double of comparable condition; knee-hole table-top DESK, 19x44, mahogany, $20. GEORGE E. HARRIS, OS 6-7860. M

FOR SALE OR TRADE

RABBITS, two, HUTCHES, $6; IRONER, Speed Queen, $50 or trade for late model typewriter. ME 3-0849. M

HOUSE TRAILER, 1951, 30', furnished, $250 down, $50 month, or anything of value for down payment; 12' HYDROPLANE, step bottom, $50 or anything of value. L. E. TATUM, DA 9-3040. M

TRUNK, large wardrobe, $20, or trade for two good 600-16 tires or radio or heater for '49 Ford. DONALD H. CROWLEY, FR 4-9563. M

TRAILER, 1955, 35 ft. Rohaway, $1500 cash for $2400 equity or trade for trailer 18' or 20' with shower, toilet. H. F. WILLIFORD, OS 5-8587. M

DRYER, General Electric, used less than a year, $125 or trade for gas dryer. C. W. DRURY, PL 9-7449. M

UTILITY TRAILER, 4' x 6' box, sell or trade for 1934 to ? car, good running condition. C. TUTAK. Write to Northrop News, Box 1717. M

MOTORCYCLE PARTS, Ariel Red Hunter, teledraulic forks, frame, engine, transmission parts, competition tank, etc. Consider prewar pick-up, firearms or ? EUGENE M. VINCENT, JR. Write to Northrop News, Box 1724. M

HORSE TRAILERS, 1-horse and 2-horse. A. L. PREWITT, FR 4-8572. M

SPEED GRAPHIC, 2¼x3¼ accessories; Kodak 8mm MOVIE CAMERA; Keystone 8mm MOVIE PROJECTOR; RCA 40-watt POWER AMPLIFIER; RCA cartridge-type WIRE RECORDER. WANT: Reflex camera, projector, electronic test equipment. W. S. COOK, DA 6-2467 evenings. M

LOT, Big Bear Lake vicinity, Moonridge Mountain Estates, $1000. E. J. KIMLING, FR 4-6429. M

FREE (To be given away)

DOG, German shepherd, all shots, 7 months old, likes children, stays outdoors. OR 2-4920. D

RENTALS OFFERED

BACHELOR COTTAGE, fenced, opposite Alondra Park golf course, pets ok, 6 mo. lease required, $45 month. JAMES HAIZLIP, OS 6-3319. E

ROOM, private entrance, adjoining bath, near main plants. OS 6-7777. E

ROOM, furnished, private entrance, private bath, $10 week. DA 4-7019. E

ROOM & BOARD, clean, good food, reasonable rates. PL 4-1105. E

APARTMENT, new 1 bedroom, unfurnished, garage, near Century & Crenshaw, $77.50. EX 6-6823, EX 9-5587 E

ROOM AND BOARD, private living room, TV, will take working mother with child or care for child in my home. FR 2-6894. E

DUPLEX, $80, 2-bedroom, garage, Manhatan Beach, FR 4-1628. E

GARAGE, 2 blocks from Plant 1, $1 week. OS 6-3696. E

APARTMENT, furnished, lower, patio, garage, vacant May 1st, Manhattan Beach. FR 5-4118. E

APARTMENT, 1-bedroom furnished, near Northrop, utilities paid, $65. DOROTHY YOUNG, OR 1-9375. E

SHARE APARTMENT, woman, Westchester, near store, transportation. PL 4-8289 after 2 p.m. E

RENTALS WANTED

COTTAGE, Manhattan or Hermosa Beach, for 2 or 3 weeks in August, or will care for your beach home while you vacation. G. WILSON, DOuglas 7-2220, Arcadia F

HOUSE or DUPLEX, Manhattan Beach, unfurnished, not over $85. GEORGIA WARD, FR 9-8074, after 4 p.m. F

CHILD CARE OFFERED

CHILD CARE, my home, days or nights, infants to 6 years, fenced yard, reasonable. DA 9-3139. G

CHILD CARE, day or night, licensed, near school, play yard, hot lunches, naps if desired. OS 6-6566. G

CHILD CARE, 3 to 10 years, fenced yard, near school, day and night, hot lunches, naps if desired. Call OS 5-7993. G

LOST

KEYS, set, 2 GM automobile, 1 house, 1 company and miscellaneous 2 or 3. R. E. BOWMAN, FR 2-1236. J

PERSONALS

IRONING, my home, you deliver and pick up, $1.25 hour. DA 3-0134. L

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

SPORTS

The Northrop News

Sea Maids in Thrill Voyage

YO HEAVE HO—! Ship Sea Maid Mariners prepare to launch canoe prior to 100-mile Colorado River trek—with help of harried adults. From left: Dorothy Johnson, helper John Allison, Shirley Rinnert, Sandra Jo Starks, Marilyn Simundsen, Counselor Dorothy Allison, Luann Whitmore, Dorothy Allison, jr. (See story on this page.)

BRAVE COLORADO RIVER IN CANOE

A story of high adventure was the one related by twelve intrepid young NRC Mariners—and two even more intrepid counselors — following their recent 100-mile canoe trip down the Colorado River.

The girls had trained for months prior to the trip in life saving, proper canoe handling techniques, and primitive camping regulations. The training paid off when they were brought face-to-face with the actual hardships of the journey.

NRC REPORTER

The group set out from Blythe in 5 canoes and journeyed down river to Martinez. The days were filled with fun—they swam in the river, explored ruins along the shore, and paddled for miles against roaring gales — and the nights were filled with moonlight, campfire songs and mosquitoes.

Highlight of the trip involved windstorms which literally blew the food off the plates, forced them to spend nights in the canoes, and marooned them for a day and a half ashore.

Another incident of note featured a cattle stampede — the ladies were reconnoitering a campsite and discovered that cattle are as afraid of girls as girls are of cattle.

All in all, the trip took five days and will probably live in memory for many years to come.

Mariners who made the journey were: Dorothy Allison, jr., Paula Allison, Dorothy Johnson, Lillian Meredith, Cecelia Myers, Loretta Neal, Shirley Nelson, Shirley Rinnert, Marilyn Simundsen, Sandra Jo Starks, Luann Whitmore, Marion Yoshiki. Counselors Ginny Satterlee and Dorothy Allison accompanied the girls on the trip.

NRC Good Time Table for May

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in Annex every Thursday evening, 7-10 p.m. Life class—models furnished. Planned weekend land and sea scape painting parties.

BIBLE STUDY, Roy Stahl
Meet daily, Plant 1, east mezzanine conference room, 11:15 a.m.; Plant 11, M.F.W. 12 noon, conf. room M1-B1, T. Th. 12:30, conference room M1-B1; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ralph Cook
Meet 1st Wednesday of month, 7:30. Night shift members meet 1st Thursday following day shift meeting, 2:30 pm.

BOWLING (days), Wayne Chamberlin
BOWLING (nights) Garland Steiner
Tuesday—6:15, Imperial Bowl
(10 teams Men's Hdcp.)
6:15, Imperial Bowl
(6 teams Men's Scratch 810)
6:30, Windsor Bowl
(6 teams Mixed Hdcp.)
6:15, Inglewood Bowl
(12 teams Mixed 5 Hdcp.)
Wednesday—6:30, Windsor Bowl
(14 teams Mixed 4 Scratch)
Thursday—6:30, Windsor Bowl
(14 teams Mixed 4 Hdcp.)

BRIDGE CLUB,
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days) Howard Linnenkohl
Meet in Annex 1st and 3rd Friday of month, 7:30 p.m. Next: May 4 (election meeting).

CAMERA CLUB (nights), Gene Beck
Meet 1st and 3rd Saturday of month. Next: May 5, 7:30 p.m.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30 p.m. Next—May 16.

FISHING (day and night)
Register all fish for NRC awards with cards supplied by Personnel Activities Trout season opens April 28.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next—April 25.

GOLF (days), Lee Johnston
Breakfast Tournament, April 29, Baldwin Hills Course. Summer Leagues start week of April 30 at Western Ave. and Alondra Golf Clubs.

GOLF (nights), Pete Lower
Summer league playing at Western Ave. Golf Club.

GUN CLUB (days), Jim Ellis
Meet 1st and 3rd Tuesdays, 7:30 p.m. Pistol shoot scheduled for Sunday, May 20, at Torrance Gun Club, 25851 Crenshaw Blvd., 7:30 a.m.

MIXED CHORUS, Florence Graveline
Meet every Tuesday, 7:30 p.m.

MODEL CRAFT CLUB, William Feldt
Meet first Monday of month, 7:30 p.m.

MODEL RAILROAD, John Felder
Meet every Thursday, 7:30 p.m

PHILATELIC CLUB, George Borton
Combined philatelic and numismatic meets 2nd and 4th Mondays. 7:30 p.m. Juniors welcome.

RADIO CLUB, Paul Serafin
Meet last Thursday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller Skating every Sunday evening, 7.30 p.m., Redondo Skateland.

SKEET CLUB, Chuck Allen
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m.

SKIN DIVING (days) George Branch
Meet 3rd Monday of month, 7:30 p.m. Next—May 21 (election meeting).

SKIN DIVING (nights) Bob Larson
Meet 3rd Wednesday of month, 1 p.m. p.m. Next—May 16.

SOFTBALL (days), Dave Heaps
Practice session begins Monday, April 30. Practice on Mon.-Wed.-Fri. at Rosecrans Playground and Tues.-Thurs. St., Gardena, from 7 to 10 p.m.,

SOFTBALL (nights), Dave Carney
Practice session begins Monday, April 30, Rosecrans Playground from 10 to 12 noon Monday through Friday.

SPORT CAR CLUB, Bill Hanna
May meeting Saturday, May 5, at Miller's Steakhouse, Inglewood. Dinner at 7 p.m. Tickets $2.25 per person Arrowhead "Ups and Downs Rallye," Sunday, May 6.

SQUARE DANCING, Bob Richter
Meet at Swimms Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING, Jack White
Meet 1st Tuesday of month, 7:30 p.m. Next—May 1 will be election meeting. Field meet on Saturday, April 28, at Carlsbad.

TOASTMASTERS 213 (days), Dave Leedy
Meet every Thursday evening, 6:30 p.m., "The Cockatoo."

TOASTMASTERS 1398, Ken Davidson
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Next—May 29.

EXCLUSIVELY FOR THE LADIES

BOWLING (days), Lee Hopkins
Women's league at Inglewood Bowl on Thursday evening at 6:15 p.m.

INTERIOR DECORATING
Classes meet every Thursday evening, 7:30 p.m. Instructress furnished. Lamp shade class now in progress.

KNITTING, Thelma Martin
Meet every Monday evening, 7:30 p.m. Craft Room, NRC Clubhouse.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet every Tuesday, 7:30 p.m. Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Hettie Horner
Meet in NRC Clubhouse Board Room 1st and 3rd Thursday evenings for dinner metings, 7 p.m.

GoldenOak Scene of G-M Search

The site of the legendary Oak of the Golden Dream was the location of a recent NRC Gem and Mineral Club field trip.

The Oak legend stems from the story that gold found clinging to the roots of onions planted in the shade of the tree resulted in a find valued at $40,000 and is reputed to be the first gold discovery in California

The tree is still standing in a corner of the Golden Oak Ranch in Placerita Canyon.

Sparked by the romance of the legend, G&Mers panned avidly for gold in the canyon streams and found it. However, it was in the form of gold dust and required mercury treatment for recovery.

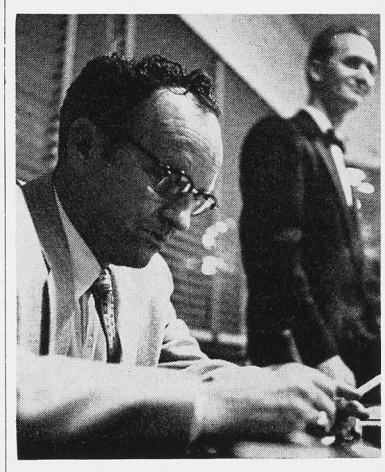
The club meets tonight at 7:30 in the NRC Clubhouse to discuss plans for the next trip. All Norcrafters invited.

Veterans and Newcomers Head NRC Council List

NRC Council veterans took the majority of appointments at the April 14 election of officers for the 1956-57 season and two new faces appeared on the coming year's roster.

Veteran officers elected to new posts were: President Walt DeVore, last year's vice-president; Vice-president Gene Boggess, formerly NRC treasurer; and Treasurer Boyd Corwin, who held last year's sergeant-at-arms post. Newcomers to the Council officer list (but very active in NRC club activities) are Florence Graveline, secretary, and Ronald Wiggins, sergeant-at-arms.

John B. Clark, director, Industrial Relations, again took his traditional role as election official, and addressed the assembly.



PRESIDENT Walt DeVore is eight-year Norcrafter, served last term as vice-president, has many years active service in NRC. Past president Hal Hunsberger is standing in background.

VICE-PRESIDENT Gene Boggess — shown with Mrs. Boggess—has sixteen years at Northrop and almost that long in NRC work. He was the '55 NRC treasurer.

TREASURER Boyd Corwin and Mrs. Corwin. Boyd, a ten-year Norcrafter, served many years as NRC Representative and last year as sergeant at arms of Club.

New Heads Announced For TM 212

The semi-annual election of officers for the Northrop Toastmasters' Club Number 212 tallied the following officers: Henry Cooper, president; Doug Johnson, educational vice-president; Howard Cornelius, administrative vice-president; Lonnie Bristol, secretary; Will Tolles, treasurer; Elmer Cain, sergeant-at-arms; George Metzger, publicity chairman.

The officers were formally installed at a dinner-dance last month. Area 11 Governor Dwight Johnson presided as installing officer.

Seafarers To Drag Ankle At Shindig

Now hear this—. All seagoing men and women — landlubbers, too—are invited to the annual Boat Club Anchor Drag next Saturday.

Dancing starts at 9 p.m. with Ron Webb and orchestra presiding on the podium. Ducats at $1.25 will be available at the door of the NRC Clubhouse Annex.

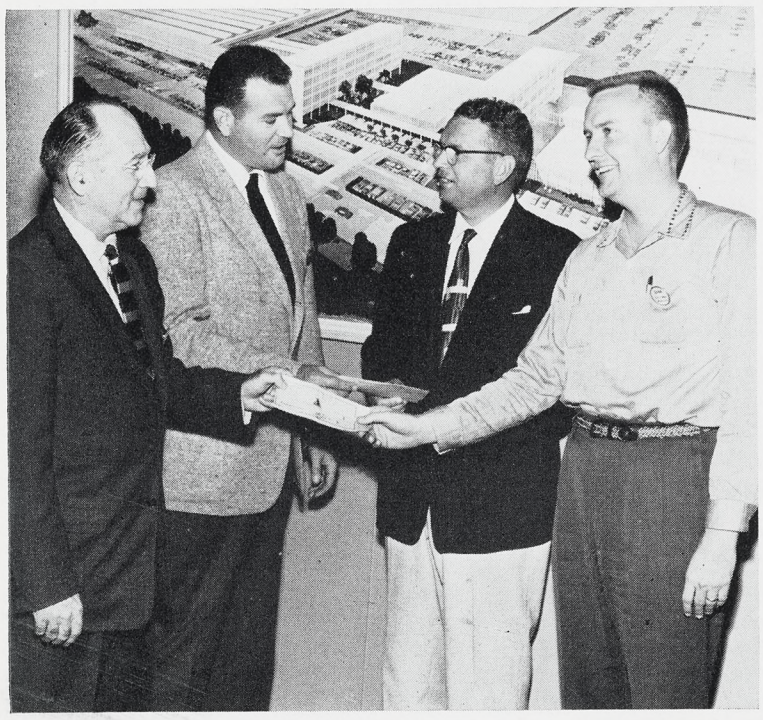
Nautical attire is in order and all hands will join in the presentation of flags and insignia to the new BC officers.

Those in line for presentations are: Ralph "Doc" Cook, commodore; Steve Sabo, vice-commodore; Kay Stuart, secretary; Fred Wheeler, treasurer; and Fleet Captains — Bob Skipper, small cruisers; Robbie Robinson, large cruisers; Art Eck, sailboats and Bob Mordue, night shift.

SECRETARY Florence Graveline. Newcomer to NRC officer ranks, Florence is seven-year Norcrafter active in Mixed Chorus activity.

SERGEANT AT ARMS Ronald Wiggins—shown with Mrs. Wiggins — serves up seven years as Norcrafter.

INTELLIGENT APPLICATION of ingenuity, energy tapped an extra source for extra cash for Norcrafters recently (see also picture below). Top photo shows Vice-president Kenneth P. Bowen, Manufacturing, making $1000 maximum Suggestion Award to Missile Assembly Leadman John Sakalis. Al Aguiar, right, represents Missile production supervision. (See story, beginning on page 1.)



ONE HUNDRED DOLLAR checks went to V. D. Prian, Power Plant Design, and H. H. Powell, Electrical Design (at right) for successfully referring new engineering personnel to Northrop employment. D. C. Stadler, Personnel Administration, and Andy Aitken, Engineering Industrial Relations, present the checks in photo. When referrals complete 90 days' employment, Norcrafters who recommended them receive $100 award offered by program.

FOR SPORTSMANSHIP—. Pam Thompson, left, NRC Women's Basketball commissioner, and Steve Boyd, team coach, accept annual Women's Industrial Basketball League sportsmanship trophy won by Northrop. Nancy Johnson, Department of Parks and Recreation, right.

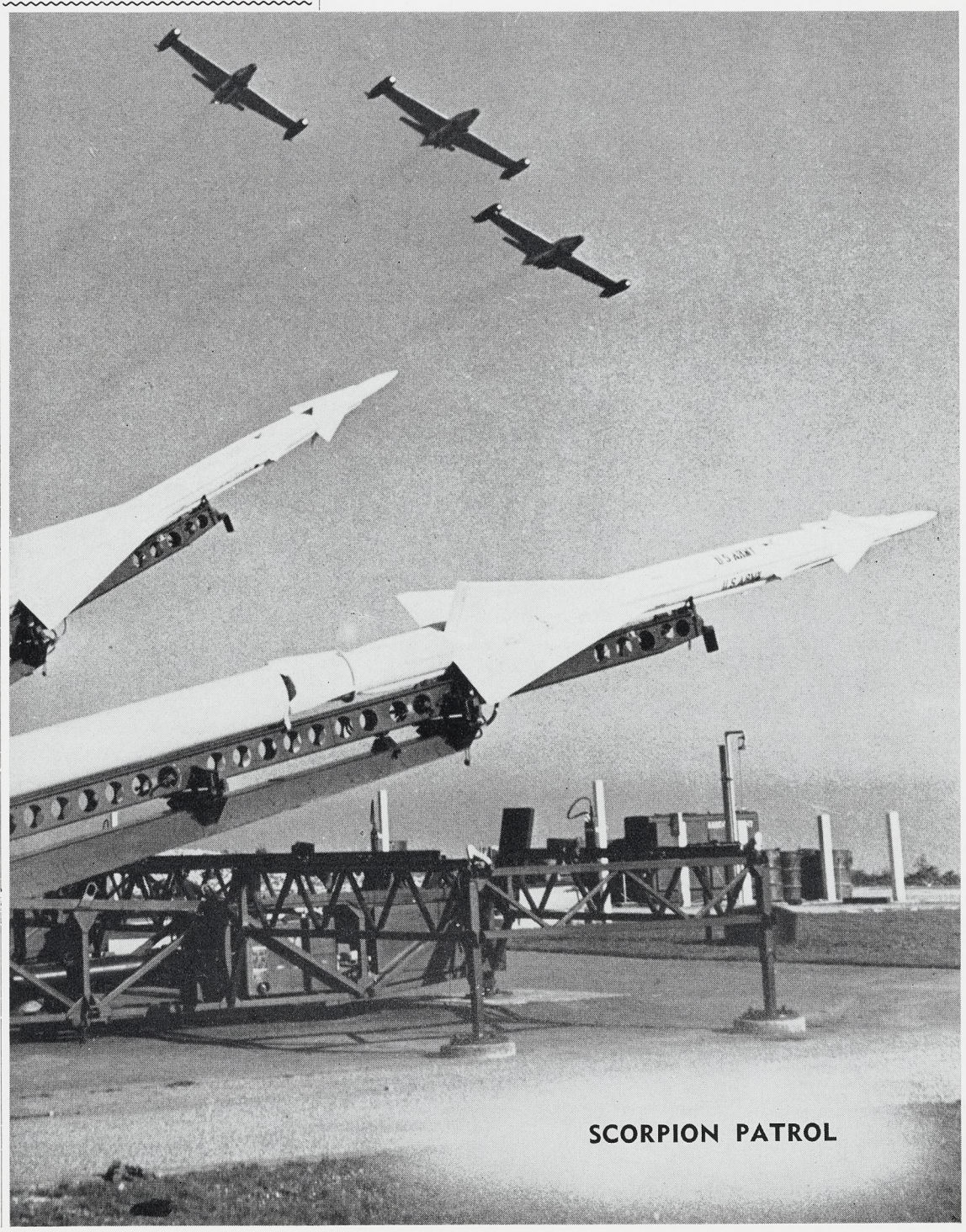
PHOTO FEATURE:

Northrop News Pictorial

George Nichols Honored

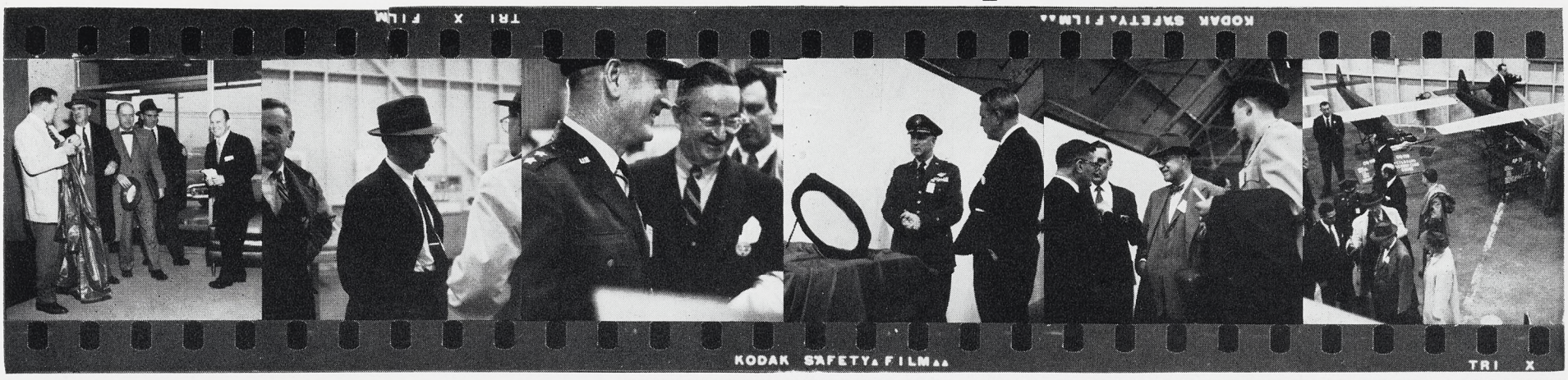
RECOGNITION for major contributions to aviation medicine came to Northrop and George Nichols, right, when Lieutenant Colonel John Paul Stapp, left, presented plaque from Aero-Medical Laboratory, Holloman Air Development Center. Stapp is well known to Norcrafters, particularly for his part in deceleration sled experiments. Award resulted from Northrop work on sleds he rode.

SCORPION PATROL roars over Palos Verdes above a Nike missile installation at Point Vicente, making striking photographic symbol of military defense teamwork on Coast. F-89s are from 437th Fighter Interceptor Squadron based at Oxnard. Northrop tech rep there is Herb Morgan. (Picture courtesy of U. S. Army Ordnance Corps.)



SCORPION PATROL

U. S. Missile Boss Visits Northrop To View Snark



SNARK STATUS was object of visit to plant by Eger V. Murphree, special assistant for guided missiles, Office of Secretary of Defense. First film in strip shows arrival of group: John J. Crowley, office of Secretary of Defense; Frank D. Newbury, assistant Secretary of Defense; Murphree, and Thomas P. Pike, assistant Secretary of Defense. Vice-president John R. Alison, Customer Relations, right.

SECOND SHOT shows Gil Nettleton, Radioplane vice-president; Secretary Pike; and President Whitley C. Collins.

ANIMATED conversation between Major General S. R. Brentnall and President Collins highlights third photo. Rear: R. E. Horner, acting assistant Secretary, Air Force.

OPTICAL exhibit holds attention of General Brentnall and Hart Miller in pic No. 4. This was one of many displays.

ENGINEERING Vice-president Edgar Schmued and Church Haenke, Military Relations, discuss facet of company operations with Murphree and Colonel H. J. Halberstadt.

FINAL PHOTO is general shot of display area, with Radioplane exhibit in background. Val Hawes, Photo Lab, took Leica photos used in this simulated film strip.

Northrop News

NORTHROP ®

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, May 9, 1956

Country Pays Tribute to Military On Armed Forces Day, May 19

Armed Forces Day will be celebrated on Saturday, May 19, throughout the country and at overseas installations, paying tribute to the military services' philosophy of "Power for Peace".

Primarily the displays which will be a part of the day's observance will focus attention on the machines and equipment that symbolize the country's armed might.

Among the displays there will be movies, models, demonstrations, fly-overs, exhibits. The Northrop F-89 Scorpion will play a principal part in many of them.

An Air Force firepower demonstration from Eglin Field, Florida, is scheduled to be telecast next Sunday on the "Wide Wide World" program, and F-89s are expected to participate. Activities in this area will wait until Saturday, May 19. (See schedule for nearby base observances in next column.)

The tributes of the day are not reserved, however, for only the equipment that will be shown. Men behind the machines share in the accolades of the day.

In their work-day world Northrop personnel are familiar with the quietly purposeful activities of the men in uniform. Their frequent contacts with military representatives such as Colonel C. W. Tennant, Air Force Plant Representative at Hawthorne; Colonel J. E. Johnston, LA Ordnance District chief; Captain W. T. Groner of the Naval Ordnance Test Station; Major R. T. Green and Captain James Anthony at Palmdale; and others have demonstrated to them the daily, unheralded but effective activities of the military.

Armed Forces Day will further emphasize the importance to the country of the services' reserve program, and highlight the contributions of the "weekend warriors".

The reserve program, many citizens have discovered, offers a spare-time opportunity to discharge personal obligation to the defense, and at the same time gives them the chance to pursue interests outside their work.

The reserves have openings for varied skills and interests which can be channeled into extremely worthwhile purpose—the "Power for Peace".

SCHEDULE AT NEARBY BASES

Nearby military bases will have an extensive program to offer citizens on Armed Forces Day, May 19.

Palmdale will have its biggest public display of aerial might, featuring at least 10 of the nation's top jet fighters and interceptors, plus displays and movies.

At the Long Beach Municipal Airport, 2347th Air Reserve Flying Center, there will be fly-overs, missile displays, fire-fighting demonstrations, and numerous other features.

At Edwards, Northrop Sky Screen, the F-89H, and the tow reel will be on display, along with a number of other aircraft and missiles.

Los Alamitos (Navy) and El Toro (Marine Corps) have also scheduled demonstrations, but details were not available at press-time.

New El Paso Radioplane Building to be Dedicated

Another milestone in Northrop-Radioplane long-range development will be marked next Friday, when President Whitley C. Collins dedicates a new Radioplane building in El Paso.

The new Radioplane building, 25,000 square feet in area, is the first in Northrop - Radioplane plans for El Paso operations.

Radioplane's El Paso plans were first announced in July of last year. The site was selected partly because of its proximity to guided missile and pilotless aircraft activities of the Army, Navy and Ordnance Corps. Nearby Fort Bliss, for example, has been a large user of RCAT drones made by Radioplane.

The pilot plant will be used for Radioplane engineering, production, repair, and modification work on drones and missiles. The new building is located on a two-acre site in El Paso; the company has also acquired approximately 600 more acres in a new industrial area outside the city.

President Collins is being accompanied to El Paso for the dedication by members of the Northrop board of directors and Radioplane representatives.

National Awards in Safety Awarded Anaheim, Florida

National first-place safety ranking of the Northrop Anaheim and Florida facilities has boosted the total of National Safety Council Awards won by the company to 24 in 12 years of competition.

The latest two top trophies were awarded recently, Lee Johnson, chief safety engineer, announced. Anaheim won its honor by maintaining a perfect safety record during 1955; that division competed against firms operating more than one million manhours.

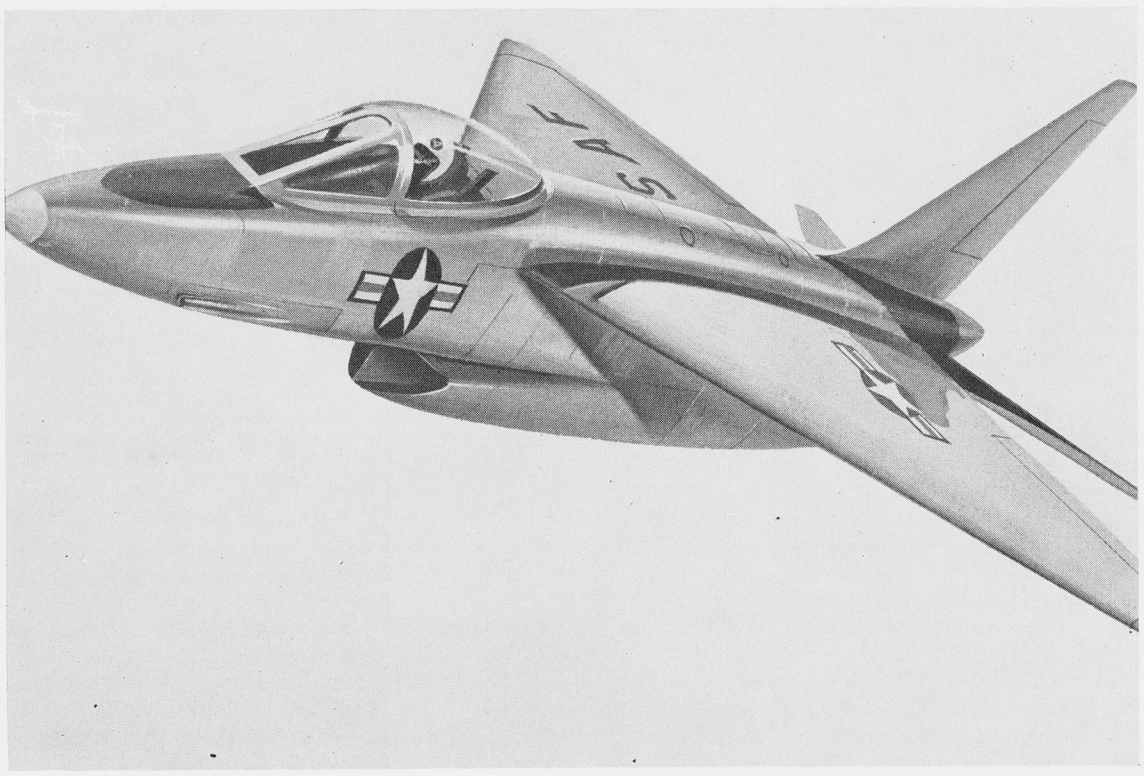
Florida Norcrafters matched the spotless record while entered in the division containing manufacturers with less than a million manhours. Two other firms also showed perfect records in this classification.

Out of 54 companies entered, only four — including Anaheim and Florida—showed perfect no-accident slates.

Northrop's Hawthorne plant, although finishing fourth in its division, compiled a .77 safety score, considerably better than the 1.44 national average.

El Segundo, Palmdale and Ontario finished fifth, seventh and ninth, respectively, among aircraft parts manufacturers operating less than one million manhours.

First Fang Story



SUPERSONIC high altitude day fighter—. The Northrop Fang is shown via artist's conception going through her paces in the stratosphere. Under wraps since fall of 1952, Fang proposal did not progress beyond mock-up stage. Influence on subsequent designs has been the Fang's job. See page 2 for details of her startling features.

Northrop Fang Secrets Reveal Design Trends

POWER POTENTIAL—MAINTENANCE

The Fang — Northrop N-102 —for the past four years under company and military security wraps, is a remarkable aircraft.

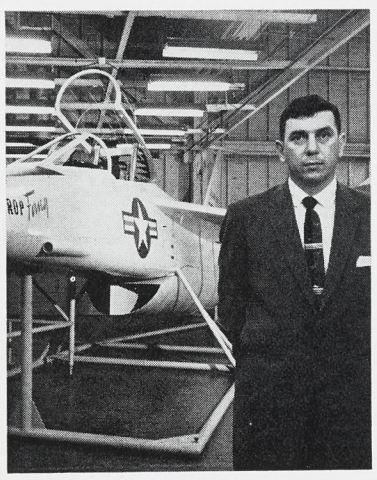
It has influenced Northrop designs to a marked degree.

It was never an airplane in the true sense — only a mock-up, gleaming white, that has done a

By AIREPORTER

good job these many months as it rests quietly in one corner of Plant Three.

Design engineers, when a particular arrangement proves hard to handle, go out and test their



JUST open the door and walk in——. Welko Gasich, chief, Preliminary Design, wanted room in a small airplane. He used hinges and imagination to get it.

ideas on the Fang. If it's a cockpit question, or instrument placement. they will be found sitting in the Fang's multiple Mach "office" to check things out.

The Fang design illustrates for Northrop engineers hard-won savvy about the prosaic, but top-important trio: accessibility, built-in potential, and maintenance ease.

Imagine an airplane that could accept three different sizes of engines without change in structure or stress.

Armament "kill build-up", entirely new in concept, is now a basic part of Northrop weapons system philosophy. The Fang structural design and component arrangement permitted the armament cavity to extend completely through the fuselage. Unique in an airplane of this size—a one-man high altitude supersonic day fighter — the arrangement provided ample space provisions for a diversified selection of lethal tools of the trade. Service was accomplished from both sides; uncluttered installation plus the large, quickly removable panels assured unusual accessibility to all armament components—whether for replacement, repair, or rapid servicing during turnaround.

The Fang would accept eight different armament installations! Conversion was what might be called supersonic. No special tools or fixtures were required. Change-overs were field jobs via packaged kits.

To get back to the engines—. The Fang could accommodate a wide variety of jet power plant installations. To provide engine interchangeability in the field as well as in production, the powerplant envelope of the Fang was suspended from the primary structure rather than being an integral part. A bigger engine required only minor mechanical changes and bigger cowling. Northrop design engineers had two slants here. The airplane would accept newer and newer engines, depending on the state of the art, plus having an operational insurance policy of being able to take many alternate engines, big or little, should powerplant production stoppages occur.

The Fang could make her crew hustle even further with single point fueling, oxygen quick disconnects, pre-loaded ammunition.

Maintenance accessibility—. The Fang's entire could be exposed on split-second orders. The nose was hinged. This opened the way to electronics, hydraulics, instruments. Windshield and canopy were hinged, opening the cockpit and instruments area. Outsized side panels exposed the armament. Cowling panels exposed the engine from intake to tail pipe.

Hot from battle, and on the ramp, in seconds a Fang's insides could be bared and men could be servicing her engines, making adjustments, replacing parts, loading ammo.

In just a few seconds more, she could be streaking for altitude again, willing to meet the enemy.

A run-down of turn time:

Land—30 seconds.

Install munitions—5 minutes.

Fuel all tanks—2.7 minutes.

Charge oxygen and reload gun camera—3 minutes.

Start and T.O.—1.2 minutes.

With service operations going on simultaneously, the Fang would be airborne from touchdown to take-off in six minutes!

True the Fang never flew, but like many other Northrop design studies, she did, and is doing a job. Her rightful glory — her quick armament changes, her engine potential, her roomy working spaces—has gone to other, newer aircraft.

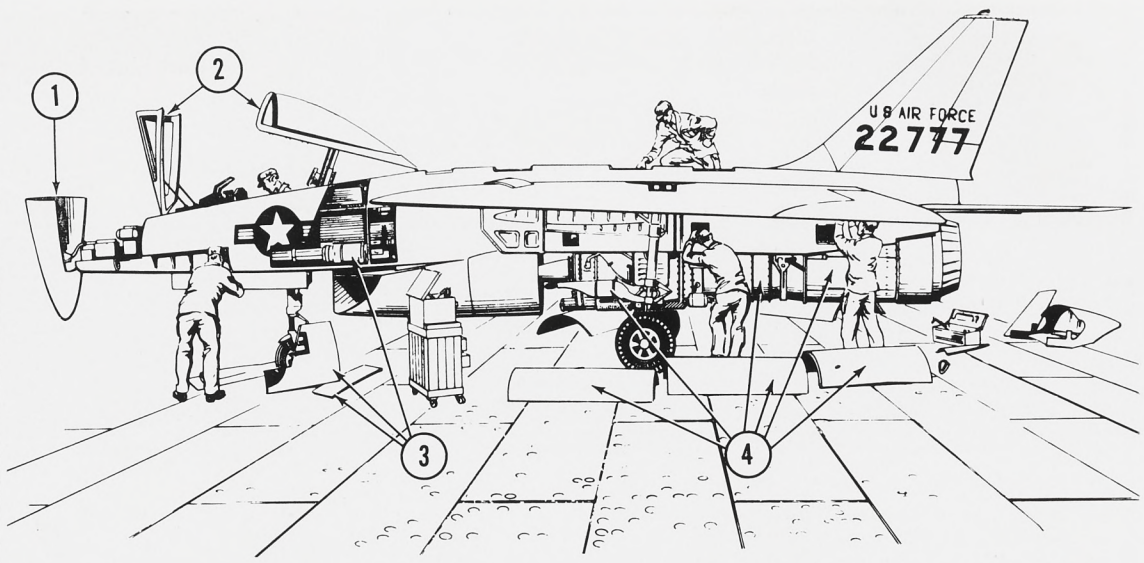
But then perhaps the Fang has flown — is flying. She was a product of men's inventive minds. She represented thought, imagination, planning, and energy (hard work). The Fang is progress and progress is not an earthbound thing.

SCORPION MODEL TO AF ACADEMY

An F-89 Scorpion model will soon join models of other top military aircraft in the new Air Force Academy museum.

The wooden model, being built to a ¼" to the foot scale by Time Miniatures, of Burbank, is made to specifications similar to those required by the AF museum at Dayton.

The project is a cooperative endeavor of Public Relations and the Wind Tunnel and Model Design department. Ralph Carlstrand, of the latter department, is coordinating the program.



ACCESSIBILITY PLUS—! Fang design set pace for quick unhampered servicing, field conversions, uncluttered internal areas—pointed way to even more ingenious maintenance features on newer aircraft. (1) Hinged nose opens to radar, electronics area. (2) Hinged windshield, canopy opens more electronics, cockpit, instruments. (3) Removable side panels—both sides—open way to armament, ammo. (4) Outsized side panels open entire full-length engine area. Bigger afterburners, engines need only doors of bigger radius. Fang turn around time, touchdown to take-off—six minutes!

Norcrafters Contribute To TPS Sked

Norcrafters' participation in the Technical Publishing Society, Inc.—organization of technical writers and editors—continues at a high level.

Last month Jim Randall, Publications and Training Service, was elected treasurer of the society, and was installed in office at the TPS April meeting. Jim has been active in the group for some time, and recently had served as editor of the TPS monthly publication.

The organization held its second annual big meeting at the Hotel Statler, featuring seminars on the first day, and business and panel sessions on the second. Tom Chapin and Frank Moore, Department 8320, participated in the first day's panels.

SEABEE FOLK IN REUNION MEET AT CLUBHOUSE

"Should auld acquaintance . . ." Nostalgic memories and tales of advantures shared will highlight the evening when former Seabees — now Norcrafters — get together this Saturday.

The clan will gather — with wives and guests—at the NRC Clubhouse annex at 7 p.m. for dinner, according to ex-Seabee Walt Warren, Engineering MK-1 Airborne department, who is master-mind behind the reunion.

Walt explained ". . . as the years go by the associations made during the war become more and more precious, so when some of us discovered how many ex-Seabees there were at Northrop, we decided it would be a good idea to get everyone together."

All ex-Seabees—Norcrafters or not—are invited to attend. Dinner reservations are being taken in the Personnel Activities office.

GATE 6 CLOSED— DRIVERS USE 21A

Personnel parking in lots X and Y began using Gate 21 A for entry and exit, following the closing last Saturday of Gate 6.

Maintenance Norcrafters and others working in the shop area north of the Administration building, and parking in Lot C, also changed entry and exit routes to Gate 21A.

From The White House

To All Americans:

An occupational accident, in the factory, on the farm, or on the construction site, has three certain results—human suffering to the victim and his family, economic loss to his employer, and waste of precious skills to his country. There is another certainty about such accidents — they are preventable.

The typically American approach to the problems of job safety — the joining together of all interested parties on a voluntary basis—has saved untold millions of workers from disability and the agonies of injury. We must all make it a business of primary importance to devise methods for preventing the needless accidents that still happen.

In order to direct the attention of all our citizens to this vital work, I have designated May 13-19 as Job Safety Week. Outstanding businessmen, farm and labor leaders, State and Federal officials, and representatives from insurance, education and safety organizations will convene in Washington for the President's Conference on Occupational Safety.

This is a work in which all of us must share. An injury anywhere is a loss to the Nation as a whole. Safety must become a daily habit in all our workplaces if we are to reach our full potential of strength.

I call upon all my fellow citizens to join with me in making Job Safety Week a success.

Signed:

Dwight D. Eisenhower.

Roy P. Jackson Takes Part in NATO Meeting

Chief Analytical Engineer Roy P. Jackson represented Northrop at a guided missiles symposium held late in April in Munich, Germany.

Eight U. S. aircraft industry representatives in all attended the symposium, which was sponsored by the NATO (North Atlantic Treaty Organization) Advisory Group for Aeronautical Research and Development.

The non-classified meeting covered the history of German guided missile development during World War II, with papers presented by scientists in charge of the work then. Discussions followed on basic areas of missile development and production, including guidance, rocket propellants, and test procedures.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 18

Published every other Wednesday
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
Permission to republish material with credit to the Northrop News will be granted.
News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

"Going My Way" forms are available from department clerks at all Northrop facilities, from PA offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)
SANTA BARBARA & WESTERN, Los Angeles. (1 rider, west of Western Ave., east of Crenshaw; phone 5 to 6 p.m. only.) P. F. WALLMAN (5504-21446, Ext. 1424), AX 3-2670. 12-1

(Zone 4)
WHITTIER. (Any place from Whittier Blvd. on the North & East, Rosecrans on the South & Valley View on the West). CHARLES DE LISLE (5237-15676, Ext. 2481). 12-4

(Zone 8)
TORRANCE BLVD. & AMAPOLA, near Crenshaw & Torrance Blvd., Torrance. (Want riders or form car pool). CAROL SHEPARD (6335-25937, Ext. 2080). FA 8-1602. 12-8

(Zone 9)
MONTE D' ORO & VIA LOS MIRADORES, Hollywood Riviera. (Will share ride, take riders, or would like ride via Calle Mayor and Pacific Coast Highway.) REX GAMBLE (5238-15660, Ext. 2572). FR 5-5782. 12-9

(Zone 13)
SEPULVEDA AND WASHINGTON BLVD., Culver City. (Will make pick up on the following route: Sepulveda to Centinela Blvd.; Centinela Blvd. to Prairie Ave., Prairie Ave. to Plant 1.) ROD WILKES (6270 - 25495, Ext. 1683, 1684), EX 8-2488. 12-13

(Zone 14)
VENICE & LA BREA, Los Angeles. (I have room for three riders. Leave approximately 6:15 a.m.). JOE HEWES (5355-41954, Ext. 2083), WE 4-1859. 12-14

7:30 a.m. — 4:15 p.m.

(Zone 5)
MILLER & LA PALMA, Miller & Orangethorpe, Buena Park. (Orangethorpe to Atlantic, Atlantic to Artesia, Artesia to Plant 1.) BEN LOVERIN (8100-32252, Ext. 1518, 1519), JA 7-4378. 13-5

(Zone 8)
WEYMOUTH & 7TH, San Pedro. (Want to form two or three man car pool; can change working hours 7:45-4:30 or 8:00-4:45.) GERRY GARTLAND (4110-31292, Ext. 2331), TE 2-9629. 13-8

(Zone 9)
PALOS VERDES DRIVE NORTH & DAPPLE GRAY LANE, Rolling Hills. (Prefer car pool, but will consider ride with, or offer ride to others. Route: either Crenshaw or Hawthorne Blvd.). E. M. SKINNER (3542-30960, Ext. 567, 2769), DA 6-0378. 13-9

SEPULVEDA BLVD. & TULITA, Redondo Beach. (Car pool preferred, will take riders — Sepulveda to Hawthorne — Redondo Beach Blvd.—Crenshaw.) FRANK R. CUETO (3424-44148, Ext. 1348), FR 5-2089.

(Zone 14)
LA BREA & WILSHIRE, Los Angeles (36). (Will pick up along La Brea south of Wilshire, Hawthorne Blvd. north of El Segundo, or Crenshaw south of Pico). MARK A. STERN (3464-30913, Ext. 2666, 2188) WE 8-1833. 13-14

CRENSHAW & VERNON or Crenshaw & Slauson, Los Angeles (43). SIDNEY R. OLDIS (5128-14408, Ext. 1929), AX 3-4449. 13-14

NEW BUS SERVICE HAWTHORNE TO EL SEGUNDO

Bus service between the Hawthorne and El Segundo plants begins next Monday, a Manufacturing division bulletin announced last week.

The vehicles will run at 20-minute intervals between 8 a.m. and 4:30 p.m., with service suspended between 11:30 a.m. and 12:15 p.m.

The route begins at the main gate, Plant 3; stops at Gate 3 and the Hawthorne facility on Hawthorne Boulevard; and proceeds to El Segundo, where stops are made at Mariposa Avenue and Maple Avenue guard gates.

RIDES OFFERED

7:30 a.m. — 5:15 p.m.

(Zone 5)
ROSEMEAD & WASHINGTON, Whittier. (Route: Rosemead, Imperial, Alameda, El Segundo. Consider car pool. Would go Imperial to Crenshaw if necessary). DONALD D. MYERS (1810-43969, Ext. 2024, 2025). OX 2-2550. 14-5

ROSEMEAD & WASHINGTON BLVD., Whittier. (Route to work via Rosemead, Imperial, Alameda and El Segundo. Would consider car pool if necessary.) DONALD D. MYERS (1810-43969, Ext. 2024-2025). OX 2-2550. 14-5

4:45 p.m. — 1:15 a.m.

(Zone 5)
ORANGETHORPE AND WOODS, Fullerton. (Car pool considered). EUGENE J. SNELLER (5587-23124, Ext. 2750), LA 5-8729 18-5

(Zone 7)
NORMANDIE & 174TH ST., Los Angeles. (Can take three riders who live anywhere between the intersection of 174th St. & Normandie Ave. and the Plant.) H. A. STERN (7220-43660, Ext. 2243).

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)
NORMANDIE & PICO, Los Angeles (6). C. N. REED (5561-42159, Ext. 1280), RE 2-3154. 2-1

CRENSHAW & 104TH, Inglewood. (Morning only.) BETTE GIDEONS (5351-43342, Ext. 541), OR 1-8804. 2-1

(Zone 4)
ATLANTIC & TWEEDY, South Gate. WILMA A. ADAMS (5583-18816, Ext. 1292). LO 6-5569. 2-4

(Zone 7)
AVALON BLVD. & 223RD, Torrance. (6 blocks east of Avalon. Would like to find someone who would drive west on 223rd from Alameda.) PEGGY PERKINS (5340-16132, Ext. 1975). 2-7

(Zone 9)
PRAIRIE or CRENSHAW & 171ST, Torrance. JOSEPH J. SCHMIDT (5445-17470, Ext. 2252), FA 1-1803. 2-9

MONTE D' ORO & VIA LOS MIRADORES, Hollywood Riviera. (Will share ride, take riders, or would like ride via Calle Mayor and Pacific Coast Highway.) REX GAMBLE (5238-15660, Ext. 2572). FR 5-5782. 2-9

(Zone 14)
FLORENCE & WEST, Los Angeles (43). BEVERLY BADISH (5352-16091, Ext. 1607). PL 8-7000. 2-14

HOLLYWOOD WAY & BURBANK BLVD., Burbank. PAUL KELLY (5373-16655, Ext. 538), HO 3-7582. 2-14

RIVERSIDE DR. AND COLFAX AVE., North Hollywood. W. L. EGGLESTON (5587-22892, Ext. 2750). 2-14

7:30 a.m. — 4:15 p.m.

(Zone 2)
VERMONT & W. 80TH, Los Angeles (44). VIOLET GALIOTO (5240-36585, Ext. 2667-2668-2669). PL 2-5732. 3-2

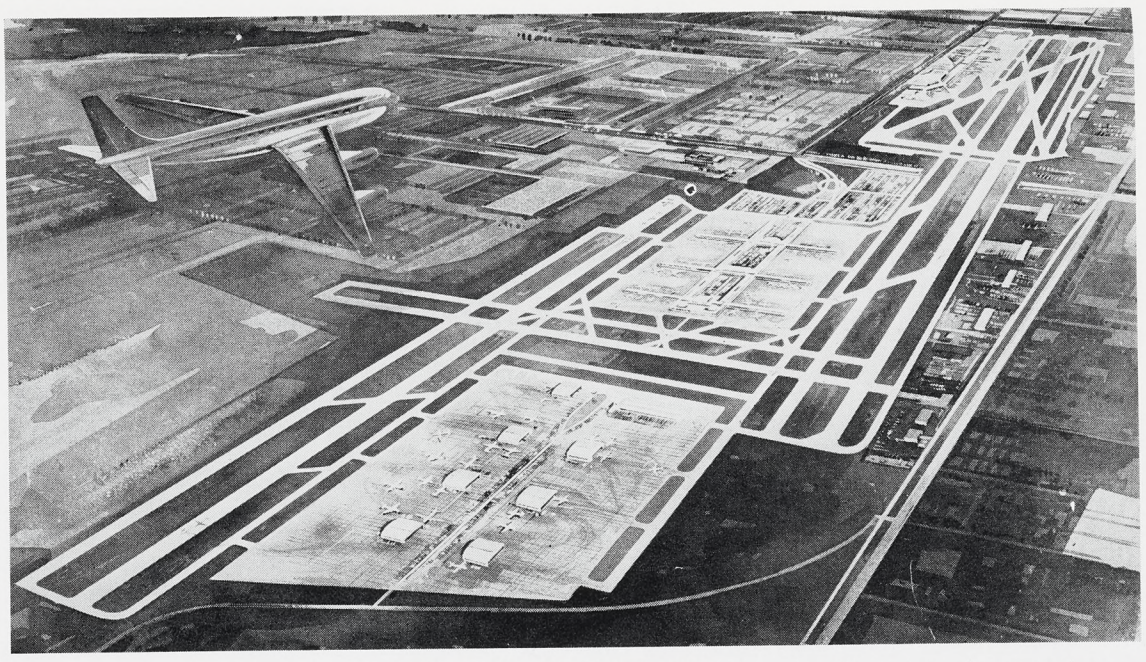
(Zone 5)
ARTESIA OR SOUTH ST. & WOODRUFF, Long Beach. SHIRLEY A. FORST (1421-12237, Ext. 2393, 1811). 3-5

(Zone 7)
AVALON BLVD. & 223RD, Torrance. (6 blocks east of Avalon. Would like to find someone who would drive west on 223rd from Alameda.) PEGGY PERKINS (5340-16132, Ext. 1975). 3-7

(Zone 8)
WEYMOUTH & 7TH, San Pedro. (Want to form two or three man car pool; can change working hours 7:45-4:30 or 8:00-4:45.) GERRY GARTLAND (4110-31292, Ext. 2331), TE 2-9629. 3-8

MANHATTAN BEACH BLVD. & CRENSHAW BLVD., Gardena. (3 women in same tract would like a ride.) B. M. ODDY (9820-28057, Ext. 2113). OS 5-6473. 3-8

CRENSHAW & 182ND, Torrance. (Ride home only.) LOIS DEVINE (3310-43974, Ext. 421). DA 9-7604. 3-8



ARTIST'S CONCEPTION from air of proposed expansion program for Los Angeles International Airport. Voters cast ballot on bond issue for expansion in June 5 primary. Development would not only be self-supporting, but would pile up 12 million dollar surplus by 1970. At left is proposed new runway for use on take-offs.

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 9)
PALOS VERDES DRIVE NORTH & DAPPLE GRAY LANE Rolling Hills. (Prefer car pool, but will consider ride with, or offer ride to others. Route: either Crenshaw or Hawthorne Blvd.). E. M. SKINNER (3542-30960, Ext. 567, 2769), DA 6-0378 3-9

COMPTON BLVD. & PRAIRIE AVE, Lawndale. DOROTHY BENNETT (3112-12170, Ext. 2480). OS 5-2089. 3-9

TULITA & AVE. "B", Redondo Beach. PAT SCHAEFER (3812-33379, Ext. 1465, 2692). FR 5-0975. 3-9

MAPLE AVE. & TORRANCE BLVD., Torrance. MAE LA BOSSIERE (5300-38884, Ext. 611), FA 8-8200. 3-9

COMPTON BLVD. & FIRMONA AVE., Lawndale. (Must be to Plant 3.) E. A. ALLEN (5530-20152, Ext. 1840). OS 5-6209. 3-9

(Zone 10)
HIGHLAND & MARINE, Manhattan Beach. JIM MULHOLLAND (7510-43818, Ext. 2068). FR 2-8506. 3-10

(Zone 12)
COAST HWY. & MANCHESTER, Venice. JEAN CHURCH (8320-37306, Ext. 1832). EX 8-0925. 3-12

(Zone 13)
LA BREA & FAIRVIEW or Centinela & La Brea, Inglewood (3). EVELYN SHARPE (3730-44193, Ext. 716). OR 1-8524. 3-13

SANTA MONICA BLVD AND FAIRFAX, Hollywood (46). (Car pool considered). IRENE LAMM (3420-39997, Ext. 1815), HO 3-4588. 3-14

7:30 a.m. — 5:15 p.m.

(Zone 8)
SONOMA & MADRID, Torrance. (Near Crenshaw & Torrance Blvd.) JUDY BLESER (3272-42934, Ext. 2462), FA 8-2279. 4-8

8:00 a.m. — 4:45 p.m.

(Zone 1)
NORMANDIE & SANTA BARBARA AVE., Los Angeles. RUTH SHOCKLEY (8310-44259, Ext. 2401), AX 4-9854. 5-1

4:45 p.m. — 1:15 a.m.

(Zone 2)
MISSION RD. & VIA FRANCISCA, Los Angeles (33). MIKE THOMAS (5562-40879, Ext. 5-4611). AN 9-8575. 8-2

NORMANDIE AND 95TH, Los Angeles (44). DORIS WELLBAUM (5507-16811, Ext. 552 or 1806). PL 6-5392. 8-2

(Zone 4)
FIGUEROA & 109TH ST., Los Angeles. W. C. KAPPAUF (5162-42975, Ext. 545). 8-4

(Zone 5)
ROSECRANS & LONG BEACH BLVD., Lynwood. CLARENCE FORMANECK (5353-18615, Ext. 1385), NE 1-7508. 8-5

Miscellaneous (Split Shifts)

(Zone 5)
CENTURY & ATLANTIC or Rosecrans & Atlantic, Compton. (Ride home only. Willing to wait until 1:15 for ride. Hours: 4:15 p.m. to 12:45 a.m.). JACKIE COLLINS (9330-40413, Ext. 2229, 2228). NE 2-2685. 10-5

(Zone 9)
INGLEWOOD BLVD. & 190TH, Redondo Beach. (From Kings Trailer Park, approx. ½ mile west of Inglewood Blvd., ride wanted, except Thursday; hours: 7:30 a.m. to 6:15 p.m.) VERA RIDEOUT (3275-27694, Ext. 2503), FR 2-7881 (message). 10-9

(Zone 11)
ANZA & 120TH ST., Hawthorne. (Hours: 4:15 p.m. to 12:15 a.m.) JOAN COVELL (9330-44203, Ext. 1471, 2111), OS 5-6305. 10-11

(Zone 13)
SEPULVEDA & JEFFERSON, Culver City. (Most of time hours 3:45 to 1:15; now working 3:45 p.m. to 2:15 a.m.). GRACE CARSON (5930-19287, Ext. 3231). VE 9-8264. 10-13

International Airport to Get Voter Test in June

Los Angeles voters will determine on the June 5 primary ballot whether to expand the Los Angeles International and San Fernando Valley airports, when they vote on a $59,000,000 self-liquidating bond issue.

Earmarked for the development of the airport system to jet age air standards, the bond issue has already won the backing of the aviation industry in the area and of a great many civic organizations.

Taxpayers' associations have also indicated support of the issue. A charter amendment also appearing on the ballot provides that all net revenues from operation of the airports will be applied to retirement of the bonds. Studies have calculated that the revenue will not only pay off the bonds and interest, but will also pile up a 12-million-dollar surplus by 1970.

Approval by the required two-thirds majority of votes would make the new LAX terminal facilities available for airline and public use by 1959.

Sheltered walks, separate departure and arrival areas, new runway, parking areas for nearly 9000 cars, and slick new stores and shops—including a 24-hour theater—feature the plans. Present passenger terminal facilities will be used for freight and cargo operations.

Racing Season Queen

PRETTIEST—. Carol Asire, Northrop receptionist at Plant Four, was chosen to reign during Hollywood Park racing season as traditional Goose Girl. Carol, born in Chio and now a resident of Inglewood, is graduate of Powers Modeling School, Inglewood High, and El Camino College. She has been at Northrop for about two years.

BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

Use regular Barter, Buy, Sell or Free Form 19-308 (10-53) available from stationery stockrooms, department clerks, Northrop News office, Personnel Activities, plant lobbies.

Ads will be run one time only. If you wish the ad repeated, please fill out another form and forward to the Northrop News Office, Department 1320, Zone 20.

Box numbers will be provided to Norcrafters who do not have home phones or who do not wish calls. Replies to box numbers are to be in writing. Box numbers replies will be forwarded by the News Office without delay.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday before publication.

FOR SALE

WASHER. Kenmore Vista-Matic, wringer, timer, pump, $50. WAYNE B. LAVELL, OR 7-8886, after 5:30 p.m. OR 7-5056. A

WEDDING BAND, 12 diamonds, platinum, $140. H. HAGSTROM, FR 4-8172, 5-8 p.m. week days. A

WRENCHES, Proto and box, 15/16"-1⅛"-17/16"-1⅝", never used. GEORGE J. DRIVER, OS 5-3901. A

MERCURY, 1951 sport coupe, $275. GERALD HUMPHREY, Box 1810. A

BUICK, 1948 convertible. C. ENGSTRAND, Box 1809. A

FURNITURE, bed divan, matching chair, coffee and end tables, $65; tiltback TV chair, $40; dining table, 4 chairs, $35, all blonde. OS 5-6936. A

SLEEPING TRAILER, Kit Kamper, butane stove, double mattress. $250. H. CHAN, OS 6-4225 after 5 p.m. A

MOTOR SCOOTER, 1952 Cushman, $125. EVERETT MORGAN. Box 1806. A

BABY BASSINETTE, $3. Box 1802. A

FORD, 1949, '51 Merc. engine, $270. PHIL STEED. PL 2-3095. A

KITCHEN, BEDROOM, LIVING ROOM FURNITURE, sell all or part; GAS RANGE; Whirlpool AUTOMATIC WASHER, matching GAS DRYER, two years, $275 set. F. AYREST, Box 1801. A

TV, 16" Zenith. 1951 mahogany console, $45. R. C. GOING. FR 6-1270. A

DE SOTO, 1946 Club Coupe, $125. R. L. KALKOFEN, FR 2-3735. A

STOVE, Western Holly; Philco REFRIGERATOR; Weber PIANO; double SPRING & MATTRESS; CHEST OF DRAWERS; wringer type WASHER. MINNIE MIMS, PL 1-8101. A

PIANO, Bailey upright. $55; Motorola CAR RADIO, $7.50. VIRGINIA HULL, PL 5-9371. A

SPEEDBOAT, 12½' inboard, glassed; you paint and do installations; includes V-8 60 h.p. motor, steel trailer, $375. D. AMORELLI, FR 2-7143. A

BINOCULARS, 6x30. Bausch & Lomb, $50. E. E. DUNN, GA 9-1736 A

EXPOSURE METER (PR-I G.E.). $22.50; STOVE, Gaffers & Sattler, $30; GAS HEATER, $15; WASHING MACHINE, Maytag, wringer type, $20. EMILIO ROMERO. PA 1-5304. A

TUNER, FM hi-fidelity (Heathkit). $25. ROY STAHL, DA 6-7877. A

FORD, 1931 Model "A" coupe (pickup), $100. MICHAEL DAVIES. FR 5-9907. A

RUG, 9'x16', $25; WARDROBE TRUNK, $10; 2 bathroom HEATERS, $2 & $1. FLOYD CALCOTE, DA 3-3282. A

FORD, 1926 Model "T" coupe, $200. JOE FEENSTRA. FR 9-5583. A

SCINTILLATOR. Model 111, one year old. $150 cash. YUkon 6-9111, Ontario. A

PUPPIES. German Shepherd & Collie. males $15. females $12. FR 5-2934. A

FORD, Model A 1929 sport roadster. convertible top. $80. ED WEBER, OR 2-5470. A

VACUUM CLEANER, tank type. $15; TV, DuMont 21" console. best offer over $150. E. D. SMITH, NE 2-5241. A

FORD. 1931 Model A, $65. BOBBIE CRAIG. FR 4-4179. A

DINING ROOM SET. 8 piece, table pad, modern, light walnut, $125. PL 9-0840.

RIFLE. Winchester automatic .22, Model 63, $50. DU 4-4017 after 5 p.m. A

HOUSETRAILER, 16'. Angelus, sleeps four, $300. F. JACOBSON, TO 1-2638. A

PUPPIES. Puli, AKC, available May 21. DA 4-7594 week ends or evenings. A

KELVINATOR, $30. L. H. ARIES. OS 6-3313. A

BOOKCASE, walnut, 4'x2'. 10" deep, $15. HAZEL C. STEWART, OR 1-6945. A

CHEVROLET, 1949 custom tudor. RODGER WALDECK. PL 4-7737. A

CHAIRS, 2 overstuffed, $25 each; CEDAR CHEST, $20; hospital BED, no mattress, $25; WASHING MACHINE, Kenmore, $25; COFFEE TABLE. $20. AX 2-8871 after 7 p.m. A

CADILLAC. 1941. 4-door, $100. C. P. ELLIS. FR 2-6029. A

COOK STOVES, gas, two, $25 each; 8' gas REFRIGERATOR. $45. J. M. HOSNER. OR 7-3690. A

DAVENPORT, matching chair, $35. PL 5-2412. A

FORD, 1947 convertible, $150. E. V. VENEZIA. FR 2-0355. A

TV, 16", $50. C. E. GAY. FR 9-4260. A

FOR SALE

SAW, 8" Craftsman, bench, planer, ¾ motor, ½" skill drill, $160. LEROY M. WACO, GL 4-4359. A

CHROME SET, 4 red chairs, glass top, $30. LU 8-0038. A

SOFA, CLUB CHAIR, $40; CHEVROLET, 1949 convertible. FR 9-6606 after 5 p.m.

DINETTE SET, chrome, yellow, 4 chairs, $25. OS 6-3696. A

DE SOTO, 1942, 4-door sedan, $95. L. A. OHLINGER, OR 8-5958. A

BIKE, boy's 26", lightweight; German LUGER. 9mm. PL 2-9597. A

HEARING AID, Microtone T-6. Micro-Mizer, battery charger, tester, $65. REX E. HEIDE, RE 2-2805. A

OLDSMOBILE, 1950 2-door 88. ROBERT BANKEN, PL 4-0342. A

MERCURY, 1950 4-door sedan. L. N. STUART. WE 6-4886. A

FORD, 1930 Model A Tudor Victoria; offer. B. J. DIXON, SR. Box 1807. A

IRONER, Kenmore Tip-Toe-Matic, $150. HARRY W. THORNE, OS 6-0500. A

MERCURY, 1951 convertible. B. F. BAUER, HE 3-8045. A

PONTIAC, 1953 2-door, $925. GEORGE BROWN, GA 1-5087. A

TRAILER, 33', 8x24 cabana, HiFi, 21" TV, $3195. H. STERLING, FR 2-4342. A

HOUSE TRAILER, 22', butane stoves, tank, sleeps 4, $600. C. J. PROMERSBERGER. LO 7-3263. A

PONTIAC, 1951 Chieftain 4-door, Hydra-Matic, $525. WM. E. BURCH, FR 4-9944.

HOUSE, 2 B.R., on lake, boating, fishing, swimming. C. C. FOWLER. Box 1805. A

BUICK, Riviera Special, 1954, $350 down and take over payments. ELDON WORMLEY, OR 2-9347. A

TRAILER PARK, 10 space, income $215 month, Bell Gardens. OR 8-9941 after 6 p.m. A

HOUSE, 3 years, 2-bedroom, den, double garage, w/w carpeting, $8600, $2200 down. L. COLEY, DA 6-0957. A

PLYMOUTH, 1949 4-door, 5 new tires, $395. L. J. BRUNKEN, TO 3-7950. A

HOUSE, 3-bedroom, corner lot, fenced, near schools, market, Victoria Park. $800 down, balance of $8450 at $73 per month. Box 1811. A

RABBITS, 3, 5 hutches, crocks, all for $25. OS 6-8890, before 4 p.m.

MOUNTAIN LOT, Crestline, overlooking Lake Gregory, electric and water available, terms, $1000; TRAILER, extra long tongue, $35. ROY R. LAUBSCHER, OX 7-7419. A

HOUSE, 3-bedroom, West Torrance, furnished, includes GE automatic washer, O'Keefe & Merritt stove; DODGE, 1946 4-door. $135. DA 4-3981. A

TIRE, 600x16 Allstate, $5; 6-gal. CROCK, bottle capper, caps, bottles, $10; PUPPIES, AKC, Dachshunds, 6 weeks old May 27. $50 each. OS 5-4994. A

LOT, residential, Fontana, 60'x135', share water, improvements in, $1500. A. CHURCHMAN, JR., VA 2-6401. A

VACUUM, Kirby, attachments, never used, $150 cash or take over payments. OR 2-9206. A

REFRIGERATOR, 9 cu. ft., GE, $145; Roper table top GAS RANGE, $35; DOUBLE BED, $20; oval braid RUG, 9'x12', pad, $20; small DESK, $5. PL 3-8944. A

HOUSE, ranch type, 2-bedroom, fireplace, extra room, 1-bedroom apartment ($62 month income) on rear. 2 car garage, $16,500, $4000 to $5000 down or submit cash offer. M. ORTH, OS 6-8331. A

HENRY J, 1951. 6 cylinder, $125; FENDER SKIRTS, 1952 Plymouth or De Soto, $5. WALDO P. CLOTT. DA 9-6923.

BUICK. 1948 sedan, $295; BABY BASSINETTE. BOX 1812. A

BED-DIVAN, MATCHING CHAIR, $75. FR 9-4160. A

VHF RECEIVER, R-28/ARC-5, 100-156 M.C., spare tubes, power supply, manual, $35 or offer. L. L. BALSAM, GR 8-4784. A

FREEZER, Norge upright, 14 cu. ft., $200. M. R. HERDER, FR 4-0247. A

CHEVROLET, 1948, $125. DON GRISH, FR 2-4673. A

TYPEWRITER, portable; HAIR DRYER; WAFFLE IRONS; VACUUM SWEEPER; automatic TOASTER; ELECTRIC BROILER; tenor GUITAR; VIOLIN; garage door SPRINGS; MANDOLIN; banjo UKELELE; CAR COOLER. JAMES H. BUSH, OS 6-6449. A

FOR SALE

COFFEE TABLE, large, blonde, $12. HAZEN J. KARP, DA 4-9095. A

JEEP, 1947 station wagon, overdrive, $375. THELMA McMULLEN, FA 8-1407.

TRAILER, metal, 1-wheel, 5' long, 45" wide, $40; TRANSMITTER, (7-9.1) mc.; RCVV BC-455B (6-9) mc., $10 for both; VACUUM CLEANER, tank-type, $35; GAS RANGE, $25. E. J. SAALFRANK, OS 6-3706. A

HOUSE, 3 bedrooms, w/w carpet, rumpus room, lighted tennis court, redwood fence, tool room, Hawthorne. J. A. MEEK, OS 6-8118. A

STUDEBAKER, 1950 4-door Champion. ANN OLIVIERI, FR 9-3772. A

RATTAN SET, bed-divan, club chair, tier end table, lamp, $150; Dulane FRYRYTE, $10. ROBERT W. VOGEL, DA 9-1705. A

RANGE. Gaffers and Sattler, $20; power SEWING MACHINE, $95; RAG RUGS, different lengths. OR 1-8901. A

LAWN MOWER; ¼" ELECTRIC DRILL; alcohol BOAT STOVE, stainless; child's two-seat SWING. TO 7-8270. A

BUTANE OUTFIT, complete. CHARLES L. JONES. OS 5-2274, after 5 p.m. only.

OVERLOAD SPRINGS, 1 pair Air-Lift, used 2 months, $15. LANE W. CURRY, PL 6-8658. A

OLDSMOBILE, 1949 "98" 4-door, $400. T. J. OLESEN, FR 7-1687. A

DINING ROOM SET, mahogany drop leaf, 4 chairs, $70. GERARD C. GARTLAND, TE 2-9629. A

SIAMESE KITTENS, Seal Point, available May 11, $15 each. WILLIAM MYERSON, OS 5-1207. A

LIFE RAFT, rubber, 5-man, oars, inflating cylinder, $45. W. DEDON, EX 4-1982.

LAND, 5 acres, Lucerne Valley, cabin (16'x16'), chicken house, water, $5750. R. E. DuPRIEST, OR 7-8797. A

GAS RANGE, 1955 O'Keefe & Merritt, deluxe, $250; grey chrome DINETTE TABLE, 4 CHAIRS, $60; 5-piece BEDROOM SET, twin beds. JAN STROHM, PL 6-1894. A

DOUBLE BED, Hollywood, 7' long, $125; PACKARD, 1955 Panama Clipper, $2700. EX 7-6375. A

OCCASIONAL CHAIRS. 2 matching, $35. JOYCE MILLER, DA 9-5757. A

HOUSE TRAILER, sleeps 4, $525. cash offer considered; GAS RANGE, Prosperity, 4-burner, $25 or offer. L. H. MATTHIES, LA 5-1959. A

RABBITS, 4; HUTCHES, 4, $15 all. B. BOY POWELL, OS 6-5341. A

PONTIAC, 1942, "6", rebuilt engine, offer. C. A. WINTERS, EX 9-3897. A

RADIO-RECORD PLAYER. Packard Bell, 12-record, $25. CHARLOTTE WOOLUMS, PL 3-7484. A

TRAILER, 1-wheel, Montgomery Ward, trailer hitches; $40 plus license fee. SHIG OKADA, RE 2-9259. A

WASHER, ABC-O-Matic, $80; DRYER, Bendix, gas, $90; REFRIGERATOR, Crosley Shelvador, $80; DINETTE SET, $35; O'Keefe & Merritt RANGE, $78; PIANO, baby grand; CHAISE LOUNGE, $15; LAWN CHAIRS, $3 each, or offer. R. CONNELY, OR 8-6548. A

PONTIAC, 1953 4-door Chieftain deluxe. $1000; 1950 FORD bus. coupe, 1951 Merc. eng., extra eng. (Ford) 2 extra tires, $400. R. L. LAWRENCE, FR 2-0578. A

GASOLINE ENGINE, 1¾ h.p., water cooled, mounted on rubber tires. $35; Cress KILN, 110-115 volt circuit, $35. F. P. FORSBERG, RE 3-7872. A

PONTIAC, 1949 sedanette. offer. L. C. CRUISE, PL 4-3442. A

FORD, 1951 "6", custom 2-door, $565. CLAIR F. SAUNDERS. OR 7-9826.

HAND MOWER, Pennsylvania, $20. S. L. CELLINI, FR 5-0957. A

OCCASIONAL CHAIRS, matching, grey nylon boucle. JEANNE SILER. DA 9-6643.

SCREEN DOOR, 6'x29"; 2 sliding WARDROBE DOORS 48"x28"; 30' of ½" PIPE; small GAS HEATER; 2 folding LAWN CHAIRS. I. M. PATTERSON, OR 4-4032. A

TWIN BEDS, Hollywood, $20; Kenmore tank type VACUUM, $30; CARPET SWEEPER, $2. W. P. SOKOLOWSKI, FR 9-8108. A

HOUSE, 2-bedroom, fireplace, garage, fenced, near ocean, Hermosa Beach, $11,950. FR 2-3893. A

STUDEBAKER, 1948 Champion, 4-door. A. A. BEYER, OR 7-3922. A

CHEVROLET, 1949, 4-door, offer. K. W. MAIER, DA 9-2346. A

OLDSMOBILES, 1941, 4-dr., 6 cyl., $60; 1942, 8, $25. RAY BOARMAN. PL 5-0863.

PALOMINO MARE, 8 yrs., $90; 14"x14" western stock SADDLE, $70. Box 1814.

WASHING MACHINE, square tub, Maytag, $20. VERNON HANCOCK, OS 6-2123. A

WASHING MACHINE, Monitor, wringer, $10; wedding & engagement RING, yellow gold, matched, $50. PL 4-0021 after 7 PM. A

BOWLING BALL, 16 pounds. FR 7-8074 after 4. A

CHEVROLET, 1948, 2-door Aero, $275. J. O. CURRAN, AX 5-1750. A

WASHING MACHINE, wringer type, $10. ROD WILKES, EX 8-2488. A

MOTORCYCLE, 1952 Velocette 21, 350cc, $225. C. M. MOSBY, DA 4-9413. A

PUPPIES, AKC Beagle, 6 weeks old. AX 4-0595. A

FOR SALE

PIANO, Bach & Bach, upright, bench, music, instructions, $100 or offer. W. GUINN, PL 4-3929. A

ACCORDION, Italian, 96 bass, case, offer. ROBERT AMSLER, LA 2-5535. A

TRIUMPH TWIN, 1950, $450. KENNETH A. GLASER, FR 9-8138. A

HOUSE, Torrance Plaza, 3-bedrooms, fenced, double garage, fireplace, $14,200 N. S. DAY, FA 8-3061. A

CHEVROLET, 1950 deluxe 5-passenger coupe, $450; Bower-x FOLDING CAMERA, $20. LLOYD H. KRAUSE, OS 5-1654. A

DAVENPORT, $40; COFFEE TABLE, (2) END TABLES, STEP-END TABLE, all for $35. J. MURPHY, PL 9-7635 after 5 week days. A

CHEVROLET, 1935 2-door standard, $45 or offer. HARVEY L. COOK, FR 2-2759. A

UMBRELLA TENT, 9'x11', floor, 2 folding chairs. $25. MARIAN AST. Box 1813.

PLATFORM ROCKER, $6; Dram 9' BOAT; POWER LAWN MOWER, Craftsman, 18", $45. W. P. MARGRITZ. PL 5-6648. A

TYPEWRITER, Remington standard 1954, $100. R. W. HOUSTON FR 9-4453. A

WANTED TO BUY

HOUSETRAILER, used, 18'-22' cash, reasonable. T. J. ESTERBROOK. OS 5-8644.

SCREENS, decorative 3-panel, 68" high; 48x48½," 36x30" two 30x48"; 60x60"; screen door, 6'8"x3'; LAWN FURNITURE; CORNER CABINET, 7' high, w/glass door. A. J. BELCHER. FR 9-1854, before 5 p.m. B

PLAYER PIANO ROLLS. any age or condition. R. L. LAWRENCE, FR 2-0578. B

BABY CRIB and PLAYPEN. WILLIAM BURGE. FR 9-4108. B

BICYCLE, man's, good condition, reasonable. M. ORTH. OS 6-8331. B

LOT, reasonable, for residence. Hawthorne, Torrance, or Manhattan Beach. LEATRICE J. GREEN, OS 6-9479. B

CHEVROLET, 1955, for cash, any model. PL 4-3814. B

FOR SALE OR TRADE

CARBURETOR, Fish, sell or trade for 9'x9' (or larger) tent. CHARLES DE LISLE, Box 1803. M

HOLLYWOOD BED, box spring, mattress, full size, $40; Dearborn HEATER, $25 or trade for vacuum. L. GAY, CL 7-3276. M

HONEY BEES, 6 hives; SHOTGUNS, double barrel, 10 gauge L. C. Smith, 12 gauge Halenback. C. HENSLEY, OS 6-1058. M

INVALID LIFTER, hydraulic; Everest & Jennings WHEEL CHAIR. LARRY BYRNE, DA 4-7888, 7 a.m.-7 p.m. M

TIRES & TUBES, two, 5.50x17, one wheel; need good 6.00x16. TED KELLY, DU 8-4082. M

FORD, 1928 pickup sport roadster, '41 V8 engine and trans. to be installed; $100 or trade for transportation car. H. C. LINNENKOHL, FR 2-4373. M

MERCURY, 1955 Monterey, 4-dr., Merc-O-Matic, take 1951 car for equity and take over payments. H. R. DAVIS, Box 1804. M

TIRE, 6.70x15, tubeless, never used. $25 or trade for exposure meter. ALLYN W. BARROWS, OR 1-3960. M

SPEED GRAPHIC, 2¼x3¼; RCA 40-watt POWER AMPLIFIER; RCA cartridge WIRE RECORDER. Want: reflex camera, projector, electronic test equipment. W. S. COOK, DA 6-2467, evenings. M

SERVI-CYCLE, consider trade for auto, $65. OS 6-8890, before 4 p.m. or weekend. M

FREEZER, Crosley, 13½ cu. ft., chest type, sell or trade for auto. washer, '54 or '55. JOSEPH F. FIOLA, OS 6-9145. M

CORVETTE, 1954, $400 cash & take over payments. KENNETH A. GLASER, FR 9-8138. M

CADILLAC, 1941 sedan, $85; RADIOS Cad. & Motorola, $25 each; CONVERTIBLE TOP, $15; Goodyear Eagle RACING TIRES 5.00x15, Ford wheels; Cessna airplane TIRES, wheels and bearings, 8.50x10. OS 6-1696. M

GRINDER, Craftsman 1/3 H.P., $40 or trade for camera equip. DICK SHEETZ, FR 6-1751. M

FREE (To be given away)

BOX SPRINGS, 2 double bed. TED KELLY, DU 8-4082. D

KITTENS, part Persian. AMOS D. ADAMS, OS 6-1696. D

RENTALS OFFERED

GARAGE APT., furnished, single, near Northrop, private bath, utilities paid, $10 week, night shift man preferred. OS 5-3985. E

HOUSE 3-bedroom, furnished, available June 10, 1-year lease required, children accepted, $150 month. DWIGHT BOLINGER, AX 4-6476. E

APARTMENT, unfurnished, 1-bdrm., private patio, garbage disposal, garage, Inglewood, adults, $75. EDWARD L. BRAY, OR 4-6163. E

DUPLEX, furnished, near Northrop, $60 month. OS 5-5762. E

RENTALS OFFERED

HOUSE, 3-bdrm., fenced, 18 mo. old, Torrance, $85 mo. FA 8-1628 after 5 p.m. E

APARTMENT, 1-bedroom, garbage disposal, 1 child O.K., $60 month, Gardena. DA 3-3242. E

APARTMENTS, unfurnished, 1-bedroom; furnished, 2-bedroom; both near bus & markets; adults. AN 2-2036. E

ROOM for one or two men. OS 6-8945.

APARTMENT, unfurnished, deluxe 1-bedroom, garage, near bus, North Inglewood. $75. OR 2-3169. E

HOUSE, 2-bedroom, den, available June 1, near 190th St. and Inglewood Ave., unfurnished, $100 month. FR 9-7066, after 5 p.m. E

DUPLEX, furnished, near Northrop, $60 month. OS 5-5762. E

DUPLEX, 2-bedroom, garage, Manhattan Beach, $80. FR 4-1628. E

ROOM AND BOARD, TV, lunches, private home, men only. FR 4-4215. E

ROOM, private entrance, bath, reasonable. J. FIOLA, OS 6-9145. E

HOUSE, 2-bedroom, unfurnished, Torrance, $80 month; APARTMENT, one bedroom, furnished, near Northrop, child O.K., $60. OS 6-5812. E

DUPLEX unfurnished, 2-bedroom, Gardena, $75. H. FARRINGTON, PL 5-8158.

DUPLEX, 2-bedroom unfurnished, fenced, no pets, $85, OR 8-8455. E

APARTMENTS, 2-bedroom, two near El Segundo & Inglewood avenue, high school children O.K. $85, $87.50 mo.; one near Northrop, new, no children, $85. FR 9-2268 after 6. E

SHARE APARTMENT, middle aged woman, 2-bedroom, furnish one bedroom, Inglewood, $35, including utilities. PAULINE TORNOVISH, OR 7-2566, after 5 p.m. E

RENTALS WANTED

HOUSE, 1 or 2 bedroom, yard, 2 adults, in or near South Bay area, to $75 month, about May 15. B. J. DIXON, SR., Box 1808. F

GARAGE SPACE, for car, near Hawthorne Blvd. and East 133rd to 135th. JIM PIECHOCKI, OS 5-6070, after 6:30 p.m. F

ROOM & BATH, private, separate from house, $10 week. CHARLES E. SATTERLEE, OS 6-8512. F

CHILD CARE OFFERED

CHILD CARE, in my home, days, hot lunches, reasonable. JOSEPH F. FIOLA, OS 6-9145. G

CHILD CARE, day or night, licensed, near school, play yard, lunches, naps. OS 6-6566. G

CHILD CARE. 3 to 10 years, fenced yard, near school, day or night, lunches, naps. OS 5-7993. G

CHILD CARE, my home, day or night, infants to 6 years, fenced. LEONA KOPPOLD. DA 9-3139. G

CHILD CARE WANTED

CHILD CARE for girls, age 4 & 7, for night shift worker, provide own transportation. PL 6-9716 days. H

LOST

NECKLACE, pearl and rhinestone, on 19 April, Western Avenue Country Club. Reward. TO 9-2979. J

PARAKEET, yellow and green, vicinity 5th Avenue and 82nd Street, reward. PL 2-4929. J

PERSONALS

RIDE OFFERED, leaving for Chicago June 15, room for couple, share expense, return July 3. JACK O. CARR, WE 6-3758, before 2:30 p.m. L

VACATION PLANS AVAILABLE FROM PA OFFICES NOW

Vacations can be a headache. At least planning them can be.

But aspirin isn't necessary. Personnel Activities offices have information on trip routes, accommodations, scenic points of interest and travel reservations.

The PA offices will help Norcrafters with vacation arrangements by providing maps outlining the most direct and scenic routes, making motel, hotel, and flight reservations, and by providing brochures on resorts and vacation spots.

The Plant One PA office extension is 2784.

SPORTS

The Northrop News

Antelope Tronarama

Big Day for Desert

They are calling it Tronarama Day and it promises to be a day long remembered.

On Sunday, May 27, at 6 a.m. 400 or more Norcrafter cars are scheduled to set out from their Palmdale and Lancaster homes carrying NRC club members, members of Palmdale - Edwards administration and supervision, 100 NRC sponsored Cub Scouts, and Norcrafters and families to the American Potash and Chemical Corporation at Trona. The cars are scheduled to caravan ten miles north of Mojave.

The idea for Tronarama Day first brightened the eye of Sam Ponton, Palmdale Personnel Activities, who decided it would be of mutual benefit to both companies if they could combine their efforts in a day of all-club competition, and exchange of ideas.

That did it. Next Northrop Palmdale and Edwards management was invited to come along for administrative conferences with American Potash and Chemical Corporation officers. Then the invitation was extended to include all desert Norcrafters and their families.

The whole town of Trona is preparing to welcome their Northrop guests. The huge 5-acre park owned by the chemical company—complete with the second largest swimming pool in California, picnic tables, barbecue pits, playground areas, ball park, bowling alleys, and dance pavilion — will be available for the day.

The schedule goes something like this—.

On the trip to Trona the caravan will tour through the ghost town of Garlock and the picturesque mining towns of Randsburg, Johannesburg, and Red Rock.

Upon arrival at the park NRC golf, trap shooting, bowling, bridge, archery, and tennis clubs will prepare for competition with like clubs from the AP&C Corp., 100 NRC square dancers will square off for dancing, the gem and mineral clubs will set off for a short field trip, and the camera clubs will have a field day.

Northrop Flight Department boys — experimental pilots and radar operators — are slated for life guard duty at the swimming pool and the kids will begin competing in contests and games for more than 150 prizes.

While the competition goes on, Northrop Palmdale and Edwards administration from all divisions and departments will confer with corresponding officers of the chemical corporation on mutual interests. They will top off discussions with a tour of the Trona plant.

All desert Norcrafters and their families are invited, says Sam, picnic lunches are in order and everything else is free.

Softball In Openers At Rosecrans

The second sign of Spring—more exciting than the robin—is the opening of ball season.

Norcrafters will hold their traditional rites of Spring — i.e. NRC softball league openers—on Monday, May 21.

Assistant Factory Manager, nights, John Breneman will throw out the first ball to send the ten night teams into the fray at 10:30 a.m. at the Rosecrans playground. Supervision of the opening day contending teams—teams to be determined later—are also planning to be on hand.

On the same day, same place, at 6:30 p.m. the day shift teams—twenty strong—will go to the post. NRC President Walt DeVore and the NRC officers will add their voices to the cheers when the first toss goes out.

Refreshments will be served by the NRC at both openings.

Spectators are invited. Rosecrans playground is located on the corner of Vermont and 149th.

MIXED CHORUS TO APPEAR IN CITY FESTIVAL

A return engagement by the NRC Mixed Chorus has been requested by the City of Inglewood for its annual music festival. The chorus participated last year.

Ten choruses from the area will present an evening of song at the Crosier Auditorium, Inglewood, on May 25 at 8 p.m.

Each chorus will sing two numbers and the ten choruses will combine under the direction of Neil Hill, El Camino College music director, in a grand finale. Everyone invited.

ALL AFTER-DARK FOLK INVITED TO SURF MEETS

Ever wonder what night shift people do all day?

About this time of year a lot of them are hitting the beaches early in the morning and spending a few leisurely hours on the business end of a rod and reel.

This being the case, all night shift Norcrafters are invited to attend a formative meeting of the NRC Surf Fishing club, nights, on Wednesday, May 16, at the NRC Clubhouse at 1 p.m.

Plans will be made for future field meets and competition for NRC awards with the day shift club.

Surf fishing is an all-family sport, so bring the folks along, invites NRC Prexy Walt DeVore.

Busy BC to Hold Cruise Next Month

Since Memorial Day falls on a Wednesday this year, the annual NRC Boat Club Memorial Day cruise will be on June 1, 2, and 3.

The NRC Catalina Clubhouse on the Isthmus has been reserved for the occasion and BC members and guests may anticipate a weekend filled with swimming fishing, and boating contests and a Saturday night steak fry. NRC trophies will be awarded contest winners.

From 35 to 40 boats are expected to participate in the cruise—carrying approximately 150 people. All Norcrafter boat owners and families are invited.

Boat owners who have not obtained a NRC Boat Club membership card are invited to contact the Personnel Activities office for application forms.

NRC groups are entitled to fee free Isthmus landing.

Details on the cruise—cast-off time and place—are also available in the PA office.

Gem and Mineral Club Illustrates Technique

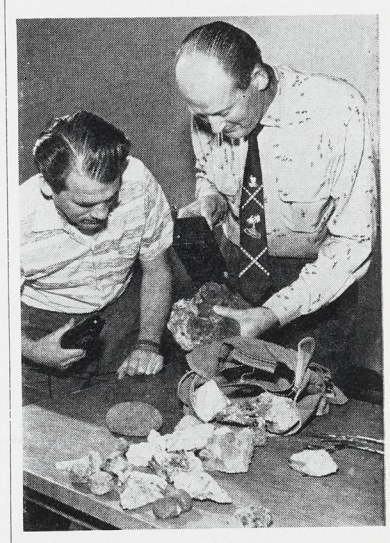
Should anyone have the opinion that rock hounding merely consists of tramping through the desert and mountains in snake proof boots picking up pretty rocks—let this story enlighten them.

The members of the NRC Gem and Mineral club have periodic forays into the wilds in search of specimens but when they return their work begins in earnest.

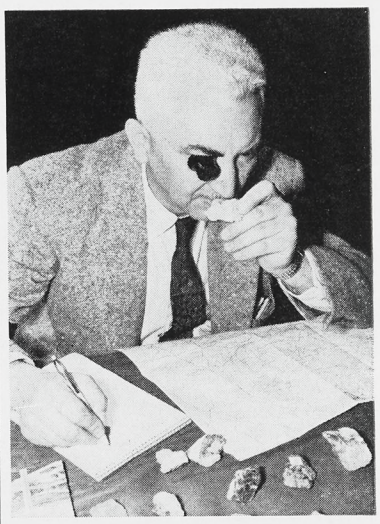
A knowledge of geology is a helpful thing in the prospecting field but the final results are computed in the laboratory and with many of the new detection instruments.

Pictured below are a few of the tests used to determine whether the find is a bonanza—or a bust.

SPECIFIC GRAVITY—. Naomi Cole reads graduated scale which tells mineral fragment weight in relation to air and water. Mineralogists check results against pre - determined mineral weight plus physical properties to determine the various elements contained . . .



BLACK LIGHT—. Roy McCoy, left, and Bud Halsted use mysterious properties of short wave light to bring out unearthly hues in testing for the tungsten mineral scheelite and certain uranium compounds. The lamps are best used in the black of a desert night.

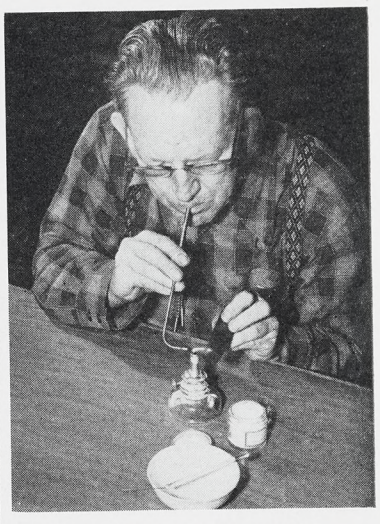


CRYSTALLOGRAPHY—. Each mineral in the universe crystallizes in absolute accordance with a predetermined atomic scheme. Here William Klein uses the mathematical science in cataloging specimens in accordance to the six basic crystal systems.

MICROANALYSIS—. High powered microscope enables Club Comish Elmer Storm to make early distinguishment between gold and pyrite, scheelite and quartz, beryl and quartz. Elmer observes color, structure, cleavage, luster, and fracture for determination.

ANCIENT ART—. The gold pan is a symbol of the prospectors' art and is still a popular method of searching for gold, platinum, zircon, and tungsten. Here G&M members receive lesson in proper use of gold pan—circular swishing motion is best, say experts.

SCINTILLATOR—. Even the neophyte can become an accomplished prospector in searching for uranium and similar elements when he uses a scintillator—demonstrated here by Royal Arbogast — or the well known geiger counter. G&M members have several in use.



BLOW PIPE ANALYSIS—. This miniature smelting operation is difficult but useful in determining the nobler metals—gold, silver, lead, platinum. Frank Augustus uses alcohol lamp for flame blowing on corner of charcoal for photographic demonstration purposes . . .

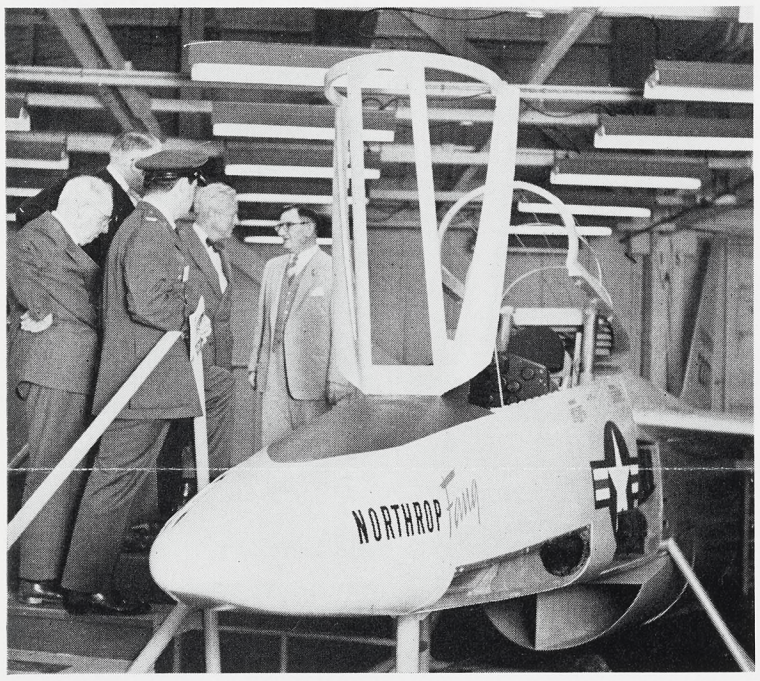
Congressmen Call

ON TOUR of aircraft plants, members of House Sub-committee on Investigations—known as Hebert Committee—recently came to Northrop. Committee Chairman F. Edward Hebert is at right in photo. From left: E. M. Noneman, Radioplane; President Whitley C. Collins; Assistant Secretary Al Morgan; committee members G. P. Miller, William E. Hess, and Hebert—all representatives.

PHOTO FEATURE:

Northrop News Pictorial

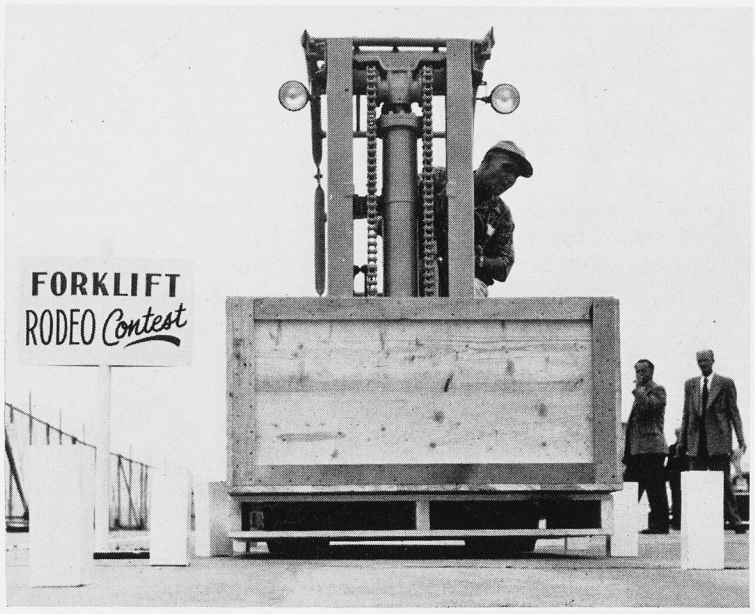
HEBERT committee looked at Fang mock-up. From left: Colonel Robert L. Kelly, Representatives Miller, Hess, and W. Sterling Cole; and, explaining Fang, Vice-president Edgar Schmued, Engineering. Group looked at missile, other exhibits.



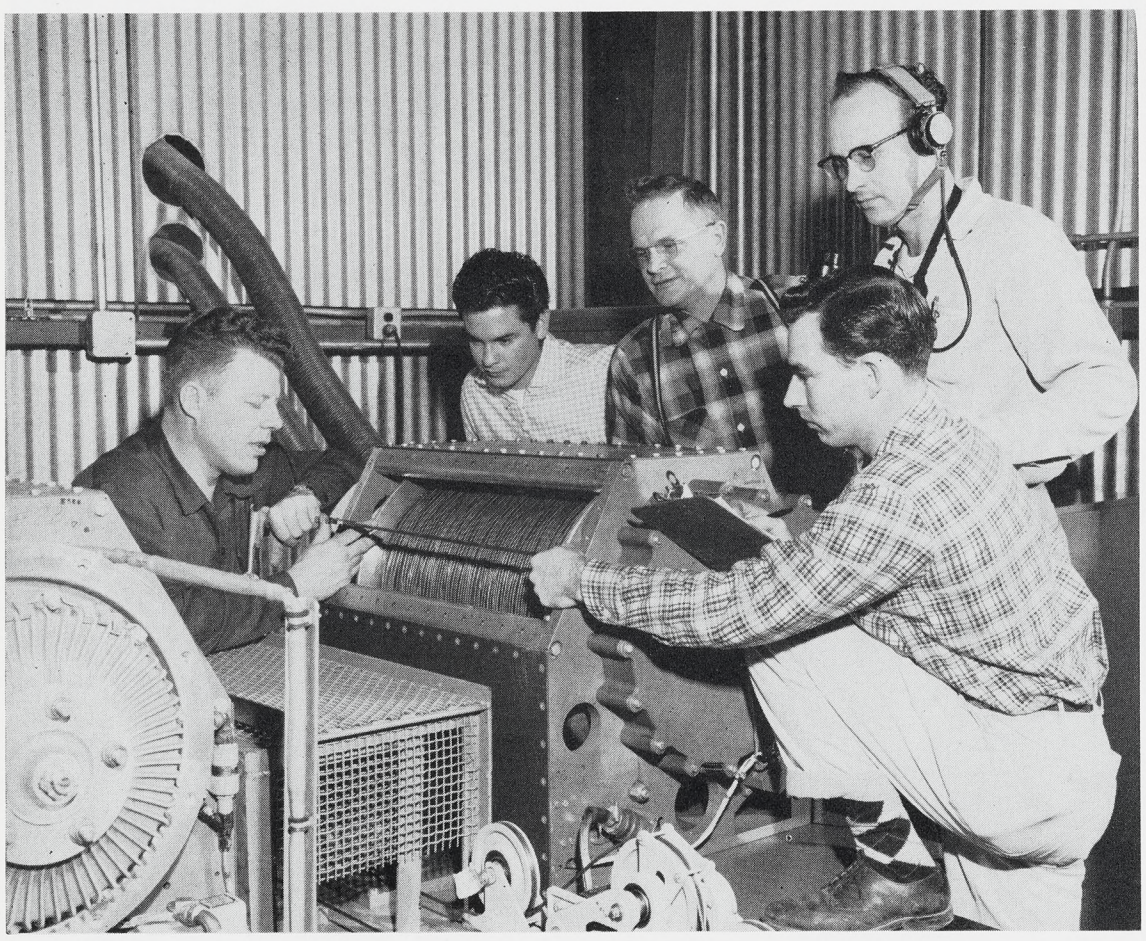
CONTEST officials confer. Gordon Grimm, Charles Hutcheson, Wes Smith, Ben Knell, and Chuck Shelly are standing. Driver is G. D. Thurmond. Front: Safety Engineering's Tom Cunningham and Lee Johnson. Rodeo winners: J. B. Dodge, G. A. McDonald, Robert Richter, and W. F. Roper.

Mechanical Bronc

FORKLIFT RODEO for Norcrafters was recently sponsored by Safety Engineering to qualify four drivers for Western Fork Truck Rodeo being held this weekend by American Material Handling Society in cooperation with American Society of Safety Engineers. Top photo shows George Kent, Department 5445, maneuvering in test.



Not for Stranded Motorists



NORTHOP TOW REEL, being manufactured at Anaheim Division, was designed for high-speed, high-altitude practice firing by hot Air Force airplanes. Anaheim Norcrafters Bill Long, Bob Palomera, Bill Ohmer, Merle Kobernus, and Chuck Pierce are shown working on one. Using 3/16" cable, tow plane can unwind close to two miles of line, five miles with 1/8" cable. Reel was invented by Dave Selegue and Bill Higbee, Experimental Flight Test, development beginning about two years ago.

Native Sons

DON ADOLFO CAMARILLO, founder of town that bears his name and member of historic California family, visited Oxnard AFB recently, saw Scorpions of 437th Fighter Interceptor Squadron. Base Commander Colonel E. F. Carey, center, guided guest on tour, and later Tech Rep Hank Waklee presented him with model F-89. Base is located on old rancho on which Don Adolfo was born.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, May 23, 1956

Assistant Secretary Sharp

BRIEFING on status of Snark, other current projects at Northrop was given Dudley C. Sharp, Assistant Secretary of Air Force (Materiel), by a top company team on Secretary's visit here. He is shown, with his executive, Colonel R. W. Gustafson, shortly after arrival. Vice-president John R. Alison (center) greeted. Also in party: Don R. Jackson, deputy, Materiel Programs; and Jack Clark, deputy chief for Facilities, AMC.

SAC's General LeMay

FAMOUS Air Force General Curtis Le May, head of Strategic Air Command, came to Northrop last week, learned of Snark activities, and visited display of company products in Plant Three. The General is shown leaving display area with Vice-presidents John R. Alison, left, and R. R. Miller.

AF Recruitment, Info Team Interviews Here Next Week

A cooperative program between the Air Force and Northrop will result in the visit next week of an Air Force Reserve recruiting and information team to the plant.

The team will interview interested Norcrafters in a mobile van which will be located at the Plant One Cafeteria on Monday and Tuesday, and at the Plant Three Cafeteria on Thursday. Interview hours are from 9 a.m. until 6 p.m.

The company's endorsement of the reserve program was indicated by an announcement from President Whitley C. Collins, who pointed out that the technical skills required by the armed forces are similar to those of people employed in defense industries.

Further Northrop interest is demonstrated by the participation today of John B. Clark, director of Industrial Relations, in a Department of Defense discussion on manpower. The meeting is being held in the Pentagon in Washington.

A letter has been sent from the 2347th Air Reserve Flying Center, Long Beach, to a large group of Norcrafters eligible for enlistment in the reserve program.

In the letter Lieutenant Colonel William R. Palmer, chief, Reserve Personnel, also points out the AF Reserve need for the

(See RECRUITMENT, page 3)

AIREPORTER

Oxnard Defense 24 Hours A Day

(See feature, page 2)

NEW DUTIES AMONG OFFICERS

Jet Trainer Program Is Stepped Up

A company task force moved into high gear last week to accelerate the jet trainer program, following an Air Force announcement that it is awarding Northrop a contract for a supersonic jet training aircraft.

Several organizational appointments were made public as the company prepared to move along from the planning and design stages. The trainer has been prominent in Northrop engineering efforts for the last two years under a program conducted with the company's own funds, the AF announcement acknowledged.

Familiar names among the appointments indicated that a wealth of aircraft experience is being utilized by the company in swinging toward production phase of the long-planned program.

Stan F. Erbeck, former F-89

(See JET TRAINER, page 3)

R. R. MILLER NOW GENERAL MANAGER

Two aircraft industry veterans joined the officers of Northrop's management team last week as the result of election following a re-assignment of responsibility and a resignation.

The new vice-presidents — C. Hart Miller and Richard R. Nolan—have behind them a total of nearly 40 years of experience in the industry.

President Whitley C. Collins announced the new assignments in a bulletin to all personnel, with the principals assuming their new duties immediately.

Top move was that naming Robert R. Miller, former vice-president, Administration, to a newly-created post of vice-president and general manager.

Miller has been a member of Northrop management since 1951 after serving as assistant to the president of Republic Aviation Corporation, and as executive vice-president and director of the Menasco Manufacturing Company.

At Northrop he was vice-president and assistant to the president before being named vice-president, Administration, a year ago.

Stepping into the Administration vice-presidency was C. Hart Miller, who, for close to two years, has been assistant to the president for the missile program.

He is a veteran of 20 years in the aircraft business, having joined Northrop from Piasecki Helicopter Corporation, where he was president and chief executive officer.

The second new company officer, Richard R. "Dick" Nolan, is vice-president in charge of Manufacturing. He succeeds Kenneth P. Bowen, who resigned to devote his time to personal business interests.

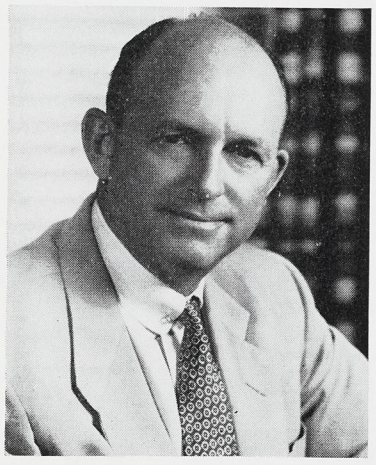
Nolan has been manager of the thriving Anaheim Division since 1951, and is one of the oldest Northrop personnel in point of service, having joined the company soon after its formation in 1939.

He has been manager of Production Engineering, assistant Factory manager, and director of service prior to his appointment as head of the Anaheim Division.

As a result of the top-level moves, President Collins announced the appointment of Thomas H. Quayle to the Anaheim Division manager's position.

(See OFFICERS, page 3)

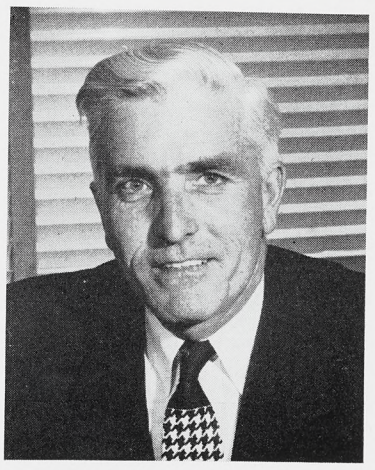
Principals In Promotions



ROBERT R. MILLER

C. HART MILLER

RICHARD R. NOLAN



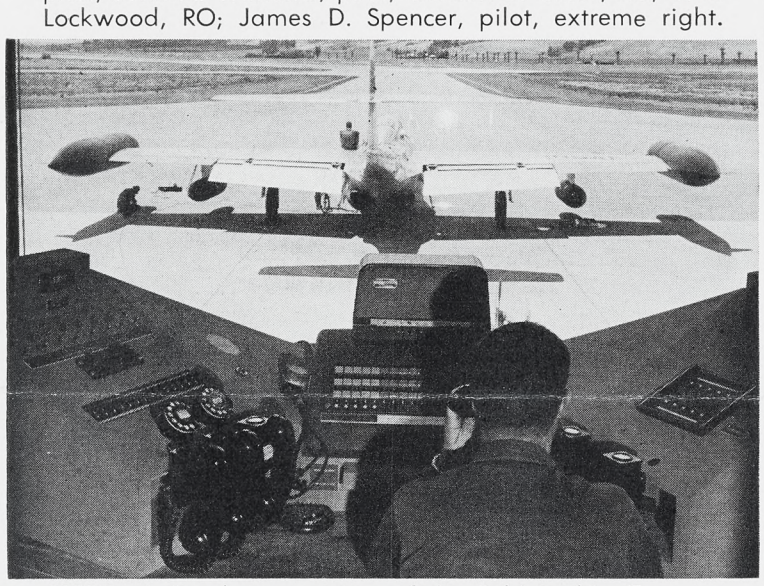
THOMAS H. QUAYLE

GEORGE DOUGLAS

SPEED AND ROCKET FIRE

SCORPIONS MOVE IN FASTER THAN PISTOL SHOT

SCRAMBLE—! Oxnard pilots and ROs ten-flat from Operations to aircraft on the line—an unidentified aircraft is on the radar screen. With chutes, life jackets, helmets and ever necessary maps, from left are: first lieutenants all, John C. Roberts, RO; R. V. Sanguinet, pilot; John A. Williams, pilot; Gordon B. Greer, RO; C. E. Lockwood, RO; James D. Spencer, pilot, extreme right.



ALERT—! Ready room view of the field is this. Twenty-four hours a day the base is ready to fight. Pylon tanks, heavy with fuel, would take this Scorpion far. Pods with 104 Mighty Mouse rockets would deliver terrific punch. At control panel is A/1c C. E. Lamb, in constant touch.

FAR-REACHING technical know-how from home factory is always in support of the Scorpion. Hank Waklee, Northrop tech rep, confers with T/Sgt. James E. Cole on aircraft performance records. Scene is engineering hangar where readily accessible Scorpion innards are forever checked for instant flying response.

THE WALLOP—. Folding fin 2.75 rockets—104 in number—any one of which could knock down biggest bomber known, are painstakingly loaded by Oxnard A/1c Eugene F. Mahoney. Scorpion is outstanding as gun platform. Electronics play critical role. Trigger is pressed by pilot; rockets are launched by computer.

Americans in the Southland work, rest, relax, are born, educated, live their span in secure knowledge that a group of men and women are dedicated to the international air safety of the area.

Around the clock—24 hours a day, every day in the year—this group watches to the north and west.

Their mission, as with all other Scorpion commands and squadrons engaged in continental defense, is to challenge and to fight

By Aireporter

and to stop, in mid-air if need be, any unknown that enters.

They do this job, they say, with "thunderbolt geometry"!

Their weapon is the Northrop F-89D Scorpion.

Their organization—the 414th Fighter Interceptor Group—Air Defense Command.

Their base—Oxnard Air Force Base.

Colonel Edwin F. Carey, jr., of Westfield, New Jersey, is the commanding officer. He is the son of an Air Force father. His men—pilots, ROs, crews, and service—are from the four corners of America.

The base is pleasantly situated. Inland from the western sea about six miles—. The Santa Monica mountains are to the south. The Santa Clara river north. East is historic Santa Susana Pass.

The prevailing wind, always important to aircraft folk, is from the west. The bellowing '89s take a long low run. There are no hazards. A row of eucalyptus trees is over a mile out. The skies are usually clear.

The Scorpion element at Oxnard is the 437th FIS. Squadron CO is Lieutenant Colonel Howard Jensen.

The '89s at Oxnard are nested on clean swept hard stands and in modern hangars. The shops are large. The place not only looks clean — it smells clean. There is the smell of jet fuel, a good home smell to people who build and fly modern aircraft.

The ready room and hangars where a special alert flight of '89s waits armed and fueled is isolated and guarded by MPs. No stragglers or idle sightseers are allowed here. This is 1440 minutes of defense concentration out of every 24 hours. The rooms where the pilots and crews are on constant alert are comfortably appointed. TVs, coke machines, a pool table, the latest magazines, beds with spanking Air Force blue blankets—.

The aircraft and men in the alert area are off and away instantly on command. The other aircraft and men, also on constant alert, follow in less time than it takes to tell.

Where do these men and Scorpions defend?

"We defend as far as the aircraft will go, and this is our instructions," they say.

This is not the radius of the aircraft. They defend with the total range of the aircraft. Norcrafter readers should reread these lines and understand them.

Life at Oxnard is for this purpose, strictly. Training of personnel with the equipment is under way at all times.

Rocket firing on sea ranges beyond the channel islands is probably the most important phase. Strange field landings all over Southern California and to the north as well help make the pilots sufficient in battle.

About the airplane that Norcrafters have built with great care and energy: "A lethal defensive weapon developed to fight in the growing electronic battlefield above us," states Colonel Carey. "General Chidlaw, first ADC commander, called it 'thunderbolt geometry'."

The men in the hangars, pilots, ROs say:

"A real good aircraft."

"Reliable."

"The best gun platform in the Air Force."

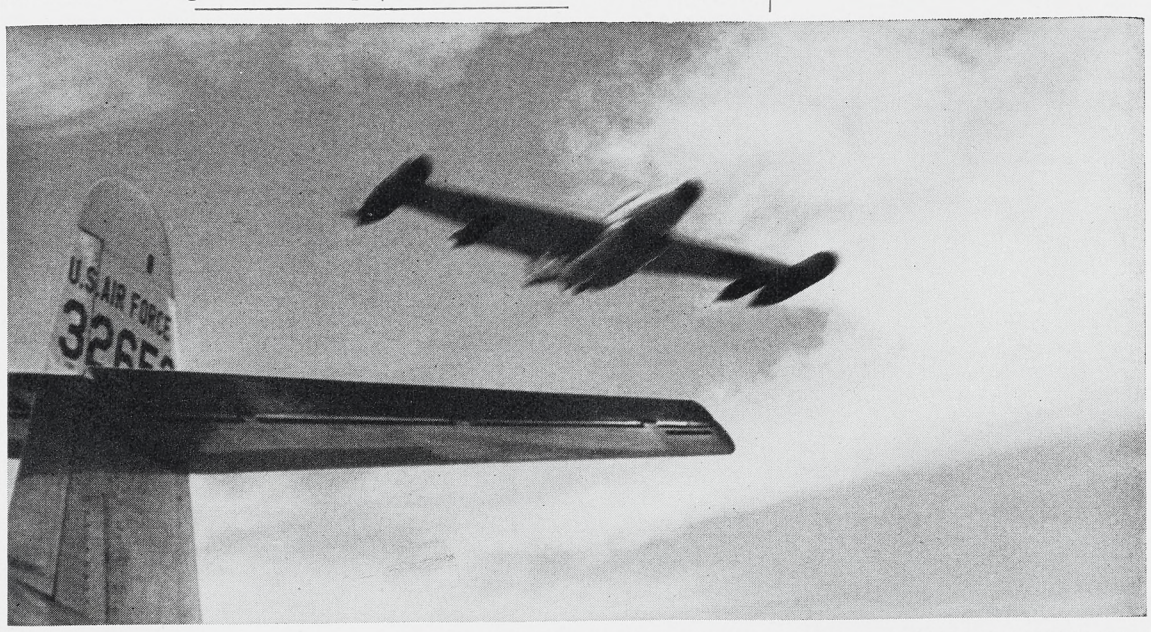
"We can handle anything they can send."

"My pilots may never see the aircraft they shoot down," says Colonel Carey. "We close a target faster than most pistol shots. The Scorpion's Hughes fire control system operates when the pilot presses the trigger—but the rockets are only fired when the computer cuts them loose."

"Backed up by Ground Control Intercept, this is our thunderbolt geometry."

COLONEL CAREY
Base C.O.

LT. COLONEL JENSEN
Squadron C.O.



SCORPION rams past hangars on patrol mission—. Oxnard Air Force Base is near the sea. Men and aircraft train month in, month out in rocket firing, strange field landings, radar, battle tactics, and teamwork.

Northrop News
Vol. 10 Northrop Field, Hawthorne, Calif. No. 19
Published every other Wednesday
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A. V. CLINE, Director
CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)
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"Going My Way" forms are available from department clerks at all Northrop facilities, from PA offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Thursday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)
RIVERSIDE DR. & LOS FELIZ BLVD., Los Angeles. JOE SEMAN (5231-15518, Ext. 2171), NO 2-0115. 12-1

(Zone 8)
CRENSHAW & LOMITA BLVD., Lomita. (Up Crenshaw to El Segundo, to Plant 1.) D. C. JORDAN (5562-22225, Ext. 1424), DA 6-3346. 12-8

WESTERN AVE. & LOMITA BLVD., Lomita. (Lomita Blvd. to Crenshaw, Crenshaw to El Segundo to Plant 1.) DONALD C. JORDAN (5562-22225, Ext. 1424), DA 6-3346. 12-8

7:30 a.m. — 4:15 p.m.

(Zone 9)
HAWTHORNE AVE. & PALOS VERDES DRIVE NORTH, Palos Verdes Estates. (Desire to exchange rides with one or two other people in car pool.) GENE JUDD (USAF, Ext. 1905, 1907), FR 5-5446. 13-9

VALLEY BLVD. & FREMONT, Los Angeles (32). (Will share ride). G. L. WILSON (AF, Ext. 1915), CA 1-7781. 13-2

7:30 a.m. — 5:15 p.m.

(Zone 4)
ROSEMEAD & WASHINGTON BLVD., Whittier. (Route via Rosemead, Imperial, Alameda and El Segundo; could change route if necessary, and would consider car pool.) DONALD D. MYERS (1810-43969, Ext. 2024), OX 2-2550. 14-4

(Zone 5)
LAPALMA & SANTA ANA FREEWAY, Anaheim. (Car pool preferred.) PAUL A. VANDER SCHANS (3113-30640, Ext. 402), KE 3-1758. 14-5

4:45 p.m. — 1:15 a.m.

(Zone 6)
VERMONT & 174TH ST. (Can pick up riders anywhere between the plant and the intersection of 174th St. & Vermont). H. A. STERN (7220-43660, Ext. 2243). 18-6

Miscellaneous - (Split Shift)

(Zone 9)
CRENSHAW & PALOS VERDES DRIVE NORTH, Rolling Hills. (Crenshaw to Plant 1; hours: 7:45 a.m. to 4:30 p.m.) M. M. WALKER (8210-14187, Ext. 557), FR 7-1732. 20-9

(Zone 13)
SHERMAN WAY & CORBIN AVE., Reseda. (Car pool preferred; hours: 7:30 a.m. to 6:15 p.m.) GERALD RABIDEAU (3541-43856, Ext. 464), DI 8-3270. 20-13

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)
HOOVER & 7TH, Los Angeles 57. (Can arrange to meet driver at Figueroa, Vermont, Western or Crenshaw.) AARON BINDER (3410-44164, Ext. 2356), DU 9-2174. 2-1

(Zone 8)
CRENSHAW & WEST 166TH, Gardena. MARY FLAHERTY (5224-15418, Ext. 692), DA 4-0790. 2-8

GAFFEY & 38TH ST. or Pacific Ave. & 38th St., San Pedro. FLOSSIE POTTORFF (5509-19971, Ext. 2075), TE 2-5452. 2-8

(Zone 12)
HARDY & INGLEWOOD, Inglewood. WILLIAM GENCO (5411-16978, Ext. 2186). OR 7-0785. 2-12

(Zone 14)
RIVERSIDE DR. & COLFAX AVE., North Hollywood. W. L. EGGLESTON (5587-22892, Ext. 2750). 2-14

7:30 a.m. — 4:15 p.m.

(Zone 2)
VALLEY BLVD. & FREMONT, Los Angeles (32). (Will share ride). G. L. WILSON (AF, Ext. 1915), CA 1-7781. 3-2

(Zone 9)
REDONDO BEACH & HAWTHORNE BLVD., Lawndale. BEVERLY DAVIS (3310-43963, Ext. 1962), FR 2-9668. 3-9

HAWTHORNE AVE. & PALOS VERDES DRIVE NORTH, Palos Verdes Estates. (Desire to exchange rides with one or two other people in car pool.) GENE JUDD (USAF, Ext. 1905, 1907), FR 5-5446. 3-9

PRAIRIE AVE. & COMPTON BLVD., Lawndale. JANIS K. BEYER (3143-43636), Ext. 795) OS 6-1043. 3-9

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 10)
AVIATION & ROSECRANS or El Segundo, Hawthorne. VICKY TUCKER (3120-13724, Ext. 1425), OS 5-7987. 3-10

(Zone 11)
MAIN & IMPERIAL HWY. or Eucalyptus & Imperial Hwy. El Segundo. VIOLA R. WATTS (3142-40426 Ext. 2021, 2022). 3-11

(Zone 12)
MANCHESTER & AIRPORT, Los Angeles. R. W. GILLETTE (3360-44278, Ext. 1889), OR 2-7384. 3-12

(Zone 13)
SAWTELLE & SEPULVEDA, Culver City. SY PICKER (5262-25074, Ext. 1669, 2065, 2134), EX 8-0330. 3-13

(Zone 14)
SANTA BARBARA & BUCKINGHAM RD., Los Angeles 8. JULIE ELLIOTT (3420-13108, Ext. 444, 626), AX 3-7591. 3-14

7:30 a.m. — 5:15 p.m.

(Zone 5)
LAPALMA & SANTA ANA FREEWAY, Anaheim. (Car pool preferred.) PAUL A. VANDER SCHANS (3113-30640, Ext. 402), KE 3-1758. 4-5

(Zone 9)
REDONDO BEACH & HAWTHORNE BLVD., Lawndale. BEVERLY DAVIS (3310-43963, Ext. 1962), FR 2-9668. 4-9

(Zone 13)
SAWTELLE & SEPULVEDA, Culver City. SY PICKER (5262-25074, Ext. 1669, 2065, 2134), EX 8-0330. 4-13

4:45 p.m. — 1:15 a.m.

(Zone 1)
VAN NESS & 54TH ST., Los Angeles (43). (Hours: 4:45 to 1:15 or 4:15 to 12:45). HELEN T. SHARP (4220-39534, Ext. 2194), AX 2-6416. 8-1

(Zone 14)
ADAMS & CRENSHAW, Los Angeles, 16. (Any main intersection with bus service to south or west Santa Monica-Venice area due planning to move.) LEE C. HOLCOMB (5620-11426, Ext. 2233), RE 4-9570. 8-14

Miscellaneous - (Split Shift)

(Zone 1)
VAN NESS & 54TH ST., Los Angeles (43). (Hours: 4:45 to 1:15 or 4:15 to 12:45). HELEN T. SHARP (4220-39534, Ext. 2194), AX 2-6416. 10-1

(Zone 5)
VALLEYVIEW & ROSECRANS, Norwalk. (Hours: 6:45 a.m. to 3:30 p.m.) NANCY JENNO (1422-37294, Ext. 696), OR 4-3064. 10-5

(Zone 13)
SHERMAN WAY & CORBIN AVE., Reseda. (Car pool preferred; hours: 7:30 a.m. to 6:15 p.m.) GERALD RABIDEAU (3541-43856, Ext. 464), DI 8-3270. 10-13

SEPULVEDA & JEFFERSON, Culver City. (Hours most of time 4:45 to 1:15; now working 4:45 p.m. to 2.15 a.m.) GRACE M. CARSON (5930-19287, Ext. 3-231), VE 9-8264. 10-13

AIEE SCHEDULES TWO MEETINGS TONIGHT—OPEN

The American Institute of Electrical Engineers is holding two meetings tonight.

AIEE members, Aircraft Section, will meet at 7:30 p.m. at the Institute of Aeronautical Sciences Building to hear R. P. Sedgwick and C. R. Moore speak on the Constant Frequency AC System.

Communication Division AIEE members are meeting at the Edison Auditorium, 601 West 5th Street, at 7:30 p.m. Speaker for the event is Sidney Hallamore. His topic will be Closed Circuit Television Application in Industry.

Reservations for the meetings are not required. Members and guests invited.

Jet Trainer

(Continued from page 1)

weapon system project engineer, was named project manager on the trainer. John N. Couberly was appointed assistant project engineer to Erbeck, and Harry Parker assistant project engineer to handle mock-up coordination.

Project Manager Erbeck has the authority to plan, direct, control, and coordinate the corporate effort of all phases of the trainer project.

Other functional characteristics of the organization which will guide the aircraft through production became apparent in a Customer Relations announcement released by Vice-president John R. Alison.

In it he named Gerard DuKet, assistant manager of Contract Administration, to maintain staff surveillance over the trainer program, consistent with Contract Administration responsibilities to management.

DuKet has the responsibility of overseeing contract requirements. expenditures, control requirements, and coordination with the customer.

The Manufacturing division had earlier named Mel Riggs, Production Engineering, to the project, with Stan Worth delegated to coordinate the program for the division.

Recruitment

(Continued from page 1)

skills of the Veteran aircraft worker.

Training is with the 452nd Bombardment Wing, Tactical, a group in which there are already 20 to 25 Norcrafters. For the one week-end per month duty, Colonel Palmer wrote, the reservist will be paid double Air Force pay.

Colonel Palmer emphasized retirement benefits to be gained by the reserve program, and a life insurance policy covering military participation. And he stressed the sense of accomplishment arising from this performance of defense activities.

Air Force spokesmen noted that any personnel interested in the reserve program would be welcome to consult the visiting team, not only those who have received the letter.

The company's invitation to the reserve team, President Collins said in his announcement, is "an indication of the company's intentions to cooperate fully with the Department of Defense and the efforts of the reserve components to meet their manpower requirements."

The potential effectiveness of the armed forces, he outlined, depends "not only upon materiel, but also upon the availability of trained manpower . . . An institution such as ours plays an important role in the distribution of available manpower between industry and the armed forces."

The program detailed affects only the Hawthorne facility Norcrafters. The Anaheim Division is making arrangements for similar encouragement of reserve recruitment, but skills and operations there indicate that interest may be directed three ways:—to the Ordnance Corps and Navy, as well as the Air Force. The division currently produces for all three.

DRESS REHEARSAL—All dressed up for their favorite sports in preparation for Tronarama Day are these Palmdale Norcrafters, front: Millie Collins and Joyce Davis. Back, left: Ray Freed, Shirley Schock, Gina Drazin, Warren Symington and Walt Bartlett. Big day is May 27. All desert Norcrafters will trek to Trona for outing.

"Airman Smith" Film Slated For Widespread Showing

Television viewers and movie goers will soon be seeing the Northrop produced film "Airman Smith"—first introduced to Norcrafters in the March 14 issue of the Northrop News.

The movie was produced for television stations, service clubs and schools to point up the nation's need for skilled young men to service USAF fighter and bomber airplanes.

The 28-minute full color movie was produced wholly by Northrop, with full cooperation of the Air Force, as a Public Relations project. Production credits go to E. R. Woodworth, film director; Felix T. Barlow, director of photography; J. L. Wilkinson, aerial photographer; and crew members Lyn Sterling, G. A. Dallwig, G. R. Rulien, R. V. George. Alan Christie developed original research and script.

Release of the film is under the direction of Bill Cox, Public Relations Motion Picture department.

The movie is available on a free-loan basis from Northrop. Information on Airman Smith bookings may be obtained by contacting Cox, extension 2753.

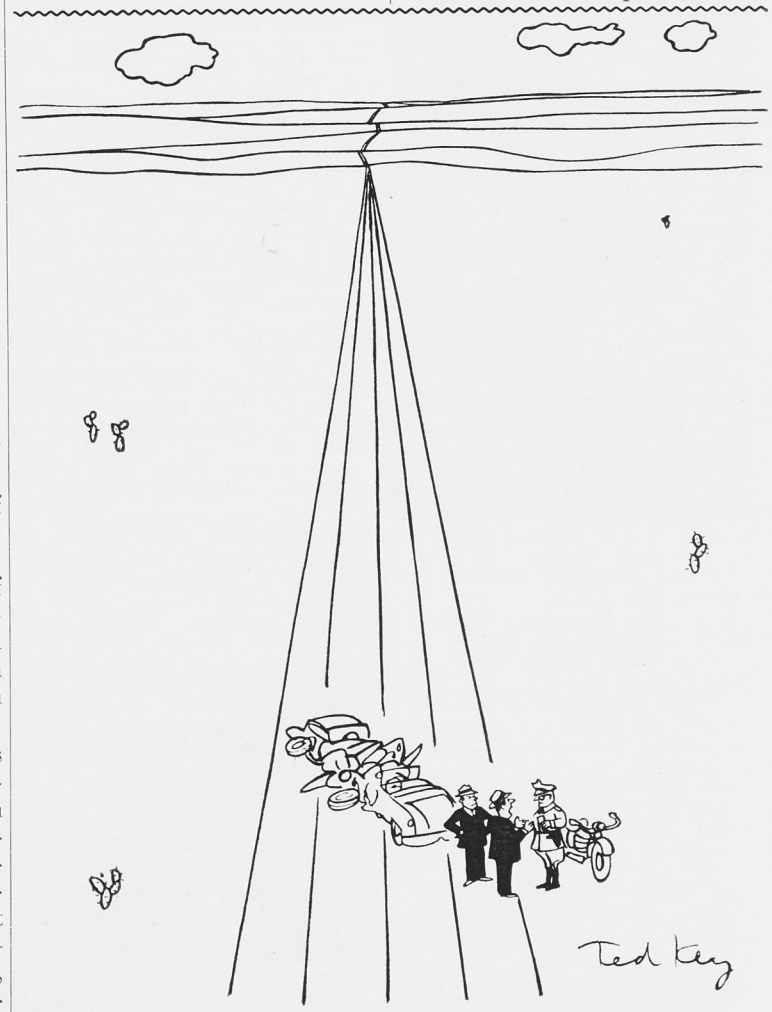
New Officers

(Continued from page 1)

Quayle has been assistant manager there. Like Nolan, he is a long-time member of the company—and is, in fact, Number Two in point of service with a hire date of August 21, 1939.

The president's announcement also named George Douglas assistant general manager of the company. Douglas has been assistant chief engineer.

Jack Mannion, former assistant director of Quality Control, was appointed assistant to the vice-president and general manager. Roy Jackson moved up to assistant chief engineer, succeeding Douglas, George Mangurian taking Jackson's former post of Chief Analytical Engineer; and Don Warner stepping into the chief of Structures position.



"I was driving along minding my own business."
(From The Travelers)

BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

Use regular Barter, Buy, Sell or Free Form 19-308 (10-53) available from stationery stockrooms, department clerks, Northrop News office, Personnel Activities, plant lobbies.

Ads will be run one time only. If you wish the ad repeated, please fill out another form and forward to the Northrop News Office, Department 1320, Zone 20.

Box numbers will be provided to Norcrafters who do not have home phones or who do not wish calls. Replies to box numbers are to be in writing. Box numbers replies will be forwarded by the News Office without delay.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday before publication.

FOR SALE

MERCURY, 1949. MARGIT VANDENBERG, OR 1-5431. A

CADILLAC, 1950 "62" sedan, $1300. W. T. PLUMMER, DA 6-0201. A

PIANO, Starr Spinet, $450; 48 bass piano ACCORDION, $25; CHAISE LOUNGE, $40; blonde DINING TABLE, 4 chairs, $125. FRANK P. NORTON, GL 4-1880. A

BED, maple, junior size, mattress. J. R. HAUPENTHAL JR., HO 5-1380. A

PLYMOUTH, 1949, $200 my equity. ESTELLE O. McCLELLAND, FR 2-8848. A

FORD, 1946 sedan, $100. ROBERT STARKEL, DA 3-1387. A

RACER, quarter-midget chassis, ¾ Briggs & Stratton motor, less body, $80. FR 5-5604. A

ACCORDION, Universal, full 120 bass, $200. EX 1-3877.

GAS RANGE, Wedgewood, $40. DA 4-2440. A

WHEEL CHAIR. $45. DAVID GLABE, TE 4-0041. A

REFRIGERATOR, Philco, 8 cu. ft., $45. F. RICHMOND, OR 2-3648. A

SPINNING ROD. Fisher, $15; ARGUS C-4, wide angle lens, $50; MULTI-METER, Simpson, 20,000 ohms, $25; SPINNING OUTFIT, Sila Flex rod, $35. LO 5-2497, after 11 a.m. A

FORD. 1949 tudor custom. $395. G. T. STERLING, FR 6-1395. A

DODGE, 1941 sedan; 1951 Hudson ENGINE, 6, short block, $40; Arvin AUTOMATIC IRON. MARIANNE McMILLAN. OR 1-4298. A

CHEVROLET, 1955 V-8. $1850. EDNA M. EDWARDS. OR 1-3558. A

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

OUTBOARD, 18′ boat, cabin sleeps 3, $750. AL WATERS, FR 4-6056. A

HEADBOARD, ivory leather, double bed, $3. B. E. RUNSWICK, OR 7-3514. A

FORD, 1949, '51 Merc. engine, $265. P. B. STEED, PL 2-3095. A

COUCH AND CHAIR, Kroehler, $50; twin mahogany BOOK SHELVES and RECORD CABINET, $25 each. EX 5-0575.

SHOTGUN, 16 ga. Remington Sportsman auto., polychoke, $95. SAM ORR, WHitehall 2-1793, Lancaster. A

PAINT COMPRESSOR, portable, SPRAY GUN, $20. I. R. PEOPLES, TO 4-5536.

CHORD ORGAN, Hammond, $50 worth of picture music included, $700. D. AMORELLI, FR 2-7143. A

STOVE, O'Keefe & Merritt, 2 years old, $150. H. L. FREEBERG, FA 8-7989. A

ACCORDION, full size, 120 bass, $75.

AQUA-LUNG, Div-air regulator, $75. CLARENCE M. JORDAN, OR 7-4133. A

OUTBOARD MOTOR, Scott-Atwater, 10 h.p., $125. PL 9-4211, after 5 p.m. A

DUAL MANIFOLD, Edmonds, '41 to '52 Buick 8, $40; OVERLOAD SPRINGS, $5. FA 8-7842, after 5 p.m. A

STOVE. Florence, $50; Maytag WRINGER WASHER, $35; small gas HEATER, $5; BICYCLE, 26", $25. HOMER RALLES, OS 6-7507. A

AQUA-LUNG, regulator valves in mouthpiece. $40. OR 8-2007. A

SKIN DIVER'S GUN, French Arbalete, $15. PL 6-3359. A

SEWING MACHINE, Singer, electric console, $80. OS 5-5306. A

ELECTRIC SHAVER. Schick; Sunbeam SHAVEMASTER. $10 each. GEORGE D. HILL. OR 4-3499. A

HOUSE TRAILER, 1949 Universal, 28′, sleeps 7. BOB HYATT. OS 6-9124. A

PLYMOUTH COUPE, 1939, $75. PL 4-7810. A

OLDSMOBILE, 1948 "98" 4-door, $200. IRVING SCHEBE, NO 2-5388, after 6 p.m. A

LUGGAGE, women's Samsonite, 3 piece, $45. M. E. BLOYE, DA 4-5483. A

FOR SALE

TRUNK KIT, electric; GEIGER COUNTER parts; TBY-1 and TBY-2, VM model 700 TAPE RECORDER; Magnavox Hi-Fi PHONOGRAPH-RADIO combination. Box 1902. A

HOUSE, 2-bedroom, Hawthorne, 4 years old. R. W. BECKIM, OS 6-0634. A

CAMERA, Polaroid Land, exposure meter, flash gun, $85. B. S. BUDGE, OR 1-2224.

PLYMOUTH, 1950 4-door. SHIRLEY SCOTT, DA 4-4014. A

CHEVROLET, 1941 2-door sedan. E. D. KINSEY, OR 8-2728. A

TIRES, four 600x16, one tube. B. M. GATTIAN, FR 5-5071, after 4 p.m. A

IRONER, Kenmore; pair LAMPS; six pair DRAPES; LIVING ROOM SET; child's WARDROBE; floor LAMP; 3 END TABLES; COFFEE TABLE. L. B. CROWSON, PL 9-0387. A

HOUSE, 2 bedrooms and den, fenced, 3 years old, equity $1600, price $7000; BABY CARRIAGE, $15; BATHINETTE, $10; BABEE TENDA, chair. $7. TE 5-2483. A

GERMAN SCHNAUSER, female, AKC, 2½ years, used to children, $45. R. S. LEITH. FR 4-0010. A

OLDSMOBILE, 1947 4-door "98". R. MASULLO, CL 6-0963. A

ROCKER ARMS, set, straight-highlift, $20; ¾ grind CAM, $40, for '49-'51 Olds V-8. R. M. LA RUE, OR 7-6311. A

PONTIAC, 1950 Catalina, $525. JOHN PARQUE. LO 6-1147. A

HOUSE TRAILER, $1000 for $2500 equity in 1956 35′ Roadcraft Riviera. O. R. CRAIG, Box 1901. A

FORD, 1948 club coupe, $200. G. NOSACKA, TO 4-7673, after 5:30 p.m.

PONTIAC, 1951 Catalina, $550. PL 1-1089. A

FORD, 1942 2-door, $100. H. W. JACKSON, FR 7-1074. A

GAS RANGE, Buck, $35. J. CAMPBELL, OR 8-1809. A

OLDSMOBILE, "8", 1941 coupe, $50; TWIN BED, complete, $30; BABY CRIB, $18.50; HIGH CHAIR, $4; Welsh BUGGY, $10; BASSINETTE, $2.50. L. SHELTON, FR 9-3871. A

GUNS, S. & W. gold seal .45 revolver; Winchester shotgun, 12 ga., pump. DAVID L. YOUNG, PL 4-6983. A

BATTERY, Goodyear, $9; HOUSE TRAILER, 15′; LAWNMOWER, $2.50; CURTAINS shower, window (nylon panels and ruffled). FR 5-9320. A

GUNS, .22 Winchester auto., $25; .22 Hi-Standard, military, $40; .38 S. & W. special, $40; old rifle, $5; DIVAN and CHAIR, $100; CHAISE LOUNGE, $10. S. M. PREWITT, EX 5-5290. A

FORD, 1953 Victoria. $1000 or sell my equity. DICK BOONE, PL 9-9369. A

KAISER, 1948 4-door, $50 or offer. JOEL KAYNE. OR 2-4793. A

FLOOR FURNACE, Un-A-Matic, $25. W. E. TOWNSEND. OS 6-3448. A

PONTIAC, 1955 4-door station wagon. JAMES P. WALSH. EA 2-2660. A

WASHER, Kenmore, semi-automatic, wringer-type, $25. HAL PARKER, Box 1912. A

CHEVROLET, 1941, $30. PAUL POZEMSKY. OS 5-8062. A

HOUSE, 2-bedroom, den, 1½ baths, 2 fireplaces, North Hollywood. W. S. COOK, PO 1-9678, evenings. A

DINING ROOM SET, 6 piece. $60; 2 piece LIVING ROOM SET, 2 end tables, coffee table. $125. OS 5-5449. A

PISTOL, .38 Colt, auto., two clips, 50 rounds ammo., $40. JERRY KREUTZ. PL 7-1122. 10 to 3. A

HEARING AID. Sonotone, offer. J. D. BRADY. OR 2-8132. A

BOAT, 16′ runabout, 16 h.p. motor, $150. WAYNE LEE, FR 2-4183, after 4 p.m. A

CAMP COT, double, folding, $10; 1941 PLYMOUTH, 4-door. $85. T. D. ODELL, PL 2-2655. A

DINING ROOM SET, solid walnut, 6 chairs, HO 2-7654. A

RIFLE, .22 Savage, scope, $20. ROY SCHNEIDER, PL 8-8812, Thurs. or Fri.

PLYMOUTH. 1951 2-door, $545. P. S. HARRINGTON, EX 4-5875, OR 8-2484.

TIRES AND TUBES, two 600x16 Firestone. AX 3-2943. A

MOTORCYCLES, 1953 Francis Barnett, $200; Triumph Trophy, $350; TV SET, GE, 12½" $25. GR 7-1937. A

ANTIQUE DISHES; 1955 Buick STEERING WHEEL, $2; BUMPER JACK, $1.50; WARDROBE TRUNK, $3; metal FIREWOOD BASKET, $2; GR 7-1539. A

FOR SALE

FORD, 1931 Model A, $75. B. E. BRADFORD, OR 2-9206. A

HOUSE, 3-bedroom, Lancaster, $76 mo., $6900 remaining, $2500 for equity. T. J. ROWLAND, OR 2-3608. A

FORD, 1951, 6 cyl., 4-door, $375. RICHARD COWE, AX 3-2477. A

CHEVROLET, 1951 2-door. C. M. SULLIVAN, PL 8-7498.

BUICK, 1950 Special 2-door. OS 6-6784.

TRAILER, 28′ 1949 Mobilehome, sleeps 4. DA 6-2409. A

HOUSE, 2-bedroom, 3 years old, $10,700, $1300 down, $85 month. OR 8-8597. A

PIANO, baby grand, Brambach. $350. AGNES E. SNYDER, OR 2-1402. A

SKI BOAT, 18′ Mercury inboard, trailer, skis, radio, $750, terms. JIM HAIZLIP, OS 6-3319. A

LUGGAGE RACK, $7.50. BOYD W. HUNTER, FR 9-4142. A

CRIB AND MATTRESS; junior TABLE-HIGH-CHAIR combinations; CAR SEAT, $18.50 for lot. OS 6-6074. A

TV, 24" Mercury, console, $100; COUCH and CHAIR, $40; FIRE PLACE SCREEN (draw type), $7. FR 5-7427. A

MOTORCYCLE, Harley-Davidson "45". PL 5-0786, after 4 p.m. A

CABIN CRUISER, 24′, bait tank, 6′ skiff, sleeps four, $1000. R. E. HEWITT, FR 9-8113. A

RECORD PLAYER, 45 r.p.m., plugs to radio, $10. J. C. HOPE, WI 7-1309, Palmdale. A

TIRE & TUBE, 7.60x15, Goodyear, $15. J. C. ORR, DA 4-0373. A

OLDSMOBILE, 1954, Super "88" 4-door, $1695. H. C. SEVERSON, OS 6-3633.

TRUNK KIT, electric, $3; Geiger counter KIT PARTS, offer. DONALD INGALLS, Box 1916. A

FREEZER, 16 cu. ft., upright, 2 years old, $200. R. LOVECE, ED 6-5992. A

HOUSE, 5-room stucco, furnished, fenced, near Northrop, $8750, $1300 down, terms. DA 4-9625. A

DACHSHUNDS, AKC registered, 6 weeks old, $50. AL HERRING, OS 5-4994. A

CASH REGISTER, National; electric SLICING MACHINE. OS 6-1607, after 4 p.m. A

IGNITION, Mallory, for '53 Mercury, $20. R. J. CALOF. OR 1-3229. A

RIFLE, 30-06, scope, $90. C. E. MILLER, DA 9-5946. A

LIVING ROOM SET, 2-piece, $40; 1946 Dodge ½-ton PICK-UP TRUCK, $300. R. C. COLLINS, DA 4-7529. A

STOVE, Crosley, electric, automatic. JOY DAVIS, DA 9-6419. A

DEEP FRYER, $10; DEN FURNITURE, rattan table, lamp, chair, couch, $135. R. W. VOGEL, DA 9-1705. A

AUTOMATIC WASHER, Bendix, bolt down type, $30. F. N. HOLLADAY, OS 6-8156. A

FORD, 1955 Fairlane club sedan. OS 5-2705. A

TRUCKS, Ford F500, 6-cyl., 1½-ton, $1750; 1949 GMC ¾-ton pick-up, $500. OR 8-6879. A

HOUSE, 2-bedroom, GI resale, $48 month, $10,750 full price, $2850 down, will take second. FA 8-6523. A

PIANO, small upright, $225. G. A. SOLIE, VE 9-6069. A

SKIRTS, 1949-1951 Mercury, $5; 10′ balsa SURFBOARD, $20. FR 4-8317, after 5 p.m. A

REFRIGERATORS, Norge, $75; Servel gas, $85. DA 6-2124. A

OLDSMOBILE, 1954, "98" deluxe Holiday coupe. DONALD J. BLACK, OS 5-1000, 5 to 8 p.m. A

LOT, 68′x124′, low down, $25 month, no interest charges to Norcrafters. FR 5-0352. A

CHEVROLET, '39 sedan, $25; AN/ARC-5 VHF 100-156 m.c. receiver, $35; AN/ARR-7 communications receiver, $45; Webster-Brush TAPE RECORDER, $45; table model RADIO. $5. GR 8-4784. A

DESK, tilt-front mahog., $10; mahog. BUREAU, $15; Silvertone HEARING AID, battery type, $50. CHARLES M. MILLER, OR 1-4814. A

HOUSE, 3-bedroom, West Torrance, near beach, shopping, $10,500, $3000 down. W. R. WATKINS, FR 5-2439. A

HOUSE, Manhattan Beach, 2-bedroom, 50x150 lot, fenced, garage, $10,500, FHA $8100. OS 6-0236. A

WANTED TO BUY

STAGE SCENERY, 2nd hand, price must be right, modern decor. PL 4-4384 after 6 p.m. B

WATER JUGS, 5 gallon glass, clean. E. J ACKERMAN, EX 7-0668. B

CROSLEY WHEEL, used, 4.75x12, reasonable. JOHN SIEFERT, AX 4-2191. B

BEDROOM SET; CHESTS; LIVING ROOM FURNITURE; leather easy CHAIR; RANGE; AUTO. WASHER. Box 1903. B

STROLLER, collapsible; combination HIGH-YOUTH CHAIR, reasonable. OR 7-8868. A

BARBEQUE, prefer portable. L. H. HATCH, OS 6-7122. B

MOVIE PROJECTOR, 8mm., viewer, splicer; hifi RECORD PLAYER. Box 1915.

Editors, Sports Notable At MC June 1 Meeting

Stimulating program fare is being offered its members by the Management Club at its June 1 meeting, with current events and sports sharing top billing.

J. Edward Murray, managing editor, and James Bassett, city editor, of the Los Angeles Mirror-News, will discuss significant news of the day, with a dual microphone arrangement planned to allow freer flow of the comments.

Murray, who has been managing editor of the Mirror since the first edition rolled off the presses in 1948, began his newspaper career with the United Press. Along the way he spent six years in Europe, as war correspondent covering the buzz bomb siege of London; serving as chief correspondent for UP at SHEAF; and directing the coverage of Mussolini's capture and death. He was also UP bureau manager for Italy, with headquarters in Rome.

Bassett's background is similarly absorbing. He joined the Times in 1934, writing aviation, feature, and science articles. When the Mirror was founded in 1948, he was made political editor of the new paper, and became city editor in 1954.

On leave of absence in 1952 he was press advisor to Vice-president Richard Nixon during the campaign, and became public relations director of the Republican National Committee in 1954. During World War II he was public relations officer, with the rank of Commander, to Fleet Admiral William F. "Bull" Halsey, jr., and the Third Fleet.

The sports entertainment of the June meeting will be provided by Bill Johns, business manager of the Los Angeles Rams, and well known in athletic circles.

Johns, accompanied by one of the Rams yet to be named, will show the fim, "Rams Highlights of '55", and discuss generally the outlook for Los Angeles' pro football representatives this fall.

A new feature of Management Club meetings — ten-minute discussions of the activities of selected departments — will make its debut at the June 1 meeting. Ward Dennis, Development Planning, will describe operations of that segment of Northrop, and its relation to the company scheme of things.

Ticket reservation forms are being mailed this week, President Ralph Hampton said.

FOR TRADE

OLDSMOBILE, 1941 4-door, trade for pick-up truck, pre-war O.K. ROBERT L. WILLYARD, OS 6-7749. C

PISTOL, Colt Challenger .22, never fired, trade for paint spray outfit. EA 2-1444.

FOR SALE OR TRADE

RACING BICYCLE, boy's English, 3 gears, $35. MAXINE LEWIS. Box 1905. M

MOTOR CRUISER, 40′, sleeps 8, $1600 or trade for equal value car or pickup. Box 1906. M

COMPUTING SCALES, Sanitary, 24 lbs., $30; 1948 DODGE, $100, or trade for ? W. T. FERRIS, PL 5-4114. M

TRAILER, 16′, 1955, offer, or will trade for furniture and appliances. Box 1904.

ENLARGER, Argus 35mm, $20 or trade for grid dip meter. W. F. MARTIN, FR 5-1977. M

FORD, 1928 sport roadster. pick-up truck, '32 shell, $100 or trade for transportation car. H. C. LINNENKOHL, FR 2-4373. M

LABRADOR RETRIEVER, female, 20 months, AKC. $100 or trade for gun. ANDY KOREN, EA 2-4747, after 4:30 p.m. M

TRAILER, suitable boats to 18′. $100 or trade for small concrete mixer. Box 1909. M

CATS, Siamese, male, 1 year and female, 3 years. Make offer, or will trade for wood working power tools. WILLIAM MYERSON, OS 5-1207. M

HENRY J, 1951 2-door "6", trade for pick-up or sell. J. R. REED, DA 6-5558.

ENGINE, rebuilt Jeep & Willys, $100 or trade for 12" lens to fit Busch 4x5 Pressman; PARTS, 1940 Studebaker (fenders, hood, arille), $10; WHEELS, 5 Plymouth, 16", $10 or trade. A. C. PRITCHARD, Box 1911. M

MOTORCYCLE, '54 Triumph, 150 c.c., trade for 500 c.c. cycle or other bike. OS 5-1789. M

CAMERA, 4x5 Pacemaker, Crown Graphic, sell or trade for good transportation car. C. R. STOCKER, PL 4-5909. M

CHEVROLET, 1941 coupe deluxe, $100. B. G. SMOTHERMON, FR 5-2959. M

SPEED GRAPHIC, 2¼x3¼; RCA WIRE RECORDER; 40-watt POWER AMPLIFIER, consider camera equip., electronic test equip. in trade. DA 6-2467, evenings.

AIRPLANE, Fairchild PT-23. $500 or trade for speedboat. Box 1914. M

CHEVROLET, 1955 Del Rey. offer. Box 1913. M

FORD, 1940 station wagon, $25 or trade. WAYNE LEE, FR 2-4183, after 4 p.m. M

FREE (To be given away)

KITTENS, available around June 1. ALBERT NADEL, EX 6-2151. D

WOOD for kindling and fire. OS 5-5306. D

CAT. Box 1910. D

RABBIT HUTCHES for 30 rabbits. PL 5-0786, after 5 p.m. D

KITTENS, 3 male, 1 female. DONALD N. WOODIS, DA 4-3250. D

RENTALS OFFERED

HOUSE, 2-bedroom, fireplace, garage, fenced, near Northrop, $100 mo., 1 year lease. FR 5-9440. E

HOUSE, 1-bedroom, no children, $40, unfurn. E. E. PATTERSON, DA 9-1268. E

APARTMENTS, 1 and 2 bedroom, unfurnished, garage, Century and Crenshaw, $77.50 and $95. EX 6-6823, EX 9-5587.

APARTMENT, lower, unfurnished, Manhattan Beach, 2 bedrooms, sun deck, garage. FR 5-4118. E

HOUSE, 3-bedroom, garage, fenced, Victoria Park, $80 month. OS 5-2064.

HOUSE, 2-bedroom, furnished, yard, maintenance included, no pets, 1 older child O.K., $135 month. T. J. OLESEN, FR 7-1687. E

HOUSE, 2-bedroom, furnished, Hawthorne, children O.K., $80 month. Box 1908. E

APARTMENT, 1-bedroom, garage, Redondo Beach, 1 block to ocean, $75 month. FR 5-5433. E

HOUSE, 4-bedroom, furnished, North Torrance, $125 mo., lease. DA 9-1761 or OS 6-1607. E

HOUSE, unfurnished 2-bedroom, garage, duplex, baby O.K., available May 29, $80, water paid. OS 6-7860. E

APARTMENT, 1-bedroom unfurnished, Hawthorne, available June 5, $70 mo., utilities, water paid. HELEN BENGEN, OS 5-8772. E

RENTALS WANTED

VACATION TRAILER, walk-in type, for first two weeks in June. L. H. HATCH, OS 6-7122. F

HOUSE, 2-bedroom, furnished, garage, no children, near Northrop, $90 max. OR 1-3985, evenings. F

CHILD CARE OFFERED

CHILD CARE, toddlers or school age, hot lunches, near York School, week days. OS 5-2705. G

LOST

CUFF LINK, dark metal, oval shape, microphone design. FR 9-4845. J

LOST, prescription glasses, safety lens, tinted light blue, brown plastic frame, no case. LEANDER J. LUDWIG, FR 4-9762. J

TWO RINGS, green stone, gold setting and red stone, gold setting, left in Plant 3 ladies' room, reward. DELL BURKE, DU 7-9287, after 5 p.m. J

FOUND

GLASSES, prescription type, brown leather case with identification "Robert & Willis, Beverly Hills" on bottom corner, in Plant 2. 5-3-56. PAUL WHITE, Box 1907.

BRACELET, silver rhinestone, flower design, at Dixie Manor night of Engr. Dance, May 5. MR. ALLEN. AX 3-2222.

PERSONALS

IN APPRECIATION: This is a note of appreciation to all the persons who helped us in our moment of sorrow. Our sincere thanks. MR. AND MRS. PATRICK H. McCLEARY. L

SPORTS

The Northrop News

ANCIENT CONTEST SLATED

CHESSMEN CHOOSE SIDES

A battle is brewing. When the air clears and the winner emerges he will be known as the champion chess player of the Hawthorne facility.

The 1956 NRC Chess tournament is scheduled to begin at noon on Monday, June 11, in all Hawthorne plants. The tourney format reads something like this:

Contestants are requested to contact Personnel Activities offices—all plants—for entry cards prior to the June 1 deadline.

Matches will be set up on a locale basis—i.e., contestants with the same lunch hours and in the same plants will be matched for early elimination bouts.

When the elimination bouts have narrowed the field down to 16 contestants, play-offs will be held in the NRC Clubhouse with NRC awards to winners and finalists.

All Norcrafter chess enthusiasts are invited to participate in this noon-time competition.

Experts Take Stand For BC Legal Queries

Any questions on marine insurance or boat owner legal responsibilities will be answered for NRC Boat Club members at their June 6 meeting.

At this time representatives from the Johnson and Higgins insurance brokerage firm will answer queries on marine insurance and the legal problems will be solved by Frank Forve of the Northrop Corporation Counsel's office.

Finale of the meeting will be a showing of the popular 16-mm color movie, "Sea Chasers".

The Boat Club meets in the NRC Clubhouse at 7:30 p.m.

BC members are also reminded of the Memorial Day cruise—to be held this year on June 2 and 3—to the Isthmus at Catalina. Personnel Activities, extension 2784, has details.

LADIES CALLED FOR SOFTBALL LEAGUE SET-UP

A special notice for all Norcrafter ladies.

A formative meeting of the 1956 NRC Girl's Softball league will be held at the NRC Clubhouse tomorrow at 7 p.m.

This first meeting will be for the purpose of selecting team officers and place of practice and for taking care of initial league business.

All Norcrafter lady softball players—novice or veteran—are invited to attend.

DISCOUNT DUCATS FOR PALLADIUM NORTHROP NIGHT

All Norcrafters and their guests are invited to dance on "Northrop Night" at the Hollywood Palladium at special discount rates.

NNATHP will be on Saturday, June 2, with Harry James and his orchestra providing the very danceable rhythms.

Personnel Activities offices have discount ducats or tickets may be purchased at the box office by presenting a Northrop identification card.

Fight Fans To Root For Own In Mains Soon

If past performance can accurately project the future, Northrop fight fans will soon be rooting for one of their own in main events about town . . . a young welterweight named Al Garza, Tool Control.

Al has been fighting prelims under the tutelage of Jake Shugrue, well-known LA fight manager, and has racked up a 15-win, three-loss, and one draw record thus far.

Garza is no newcomer to the ring, though his face is new to Southland fans. He was a two-time Golden Gloves champion in Detroit, and took the CYO three years running. He made it up as far as the semi-final round in Chicago's Tournament of Champions.

Al hung up his gloves for awhile, but after moving to California in '53, he stayed away from the ring for only a year before getting back in. He trains daily at the Paul Matty gym at 78th and Hoover.

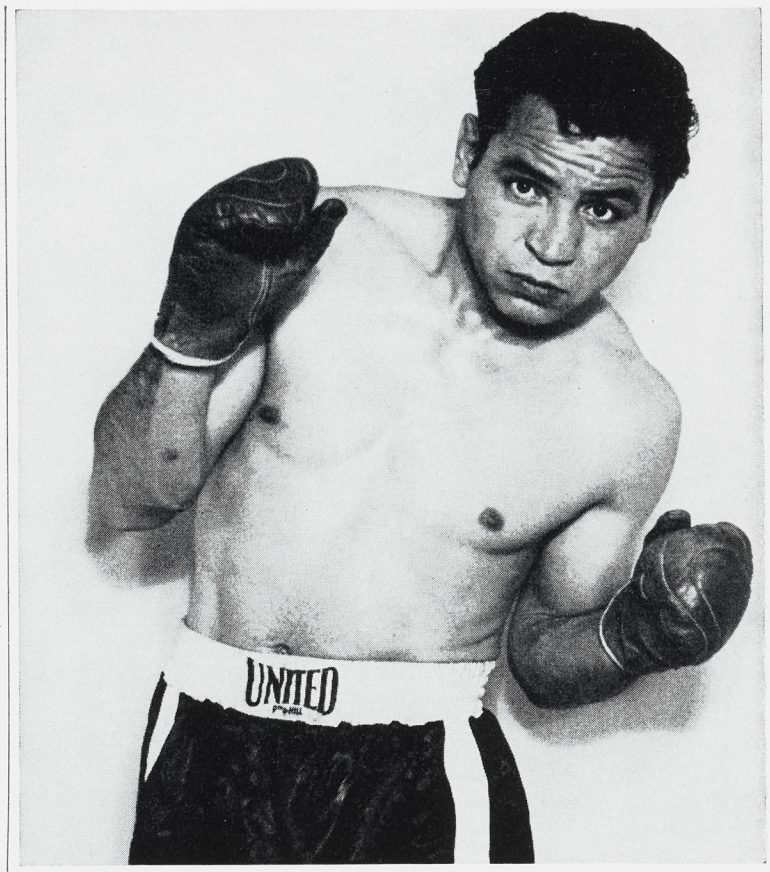
His philosophy is a good one for a fighter—he never worries about his opponent.

"Why should both of us worry?" he shrugs.

Al is the type of fighter, too, who believes in stepping in and whaling away—"that's what the customers want, anyway".

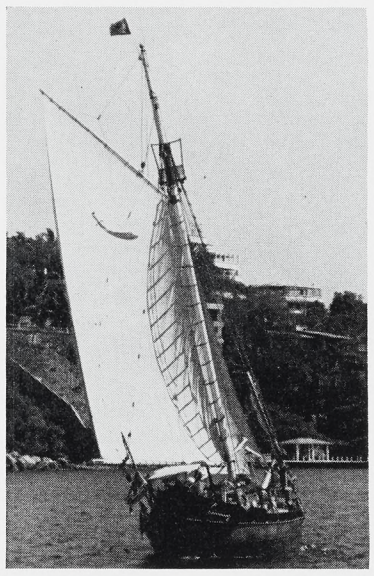
He's from a fighting family, a cousin, Joe, having run up a win string of 26 straight back in Detroit before getting knocked over by Chuck Davey.

"You can ask anyone from Detroit," Al says, "about the Garza boys. We'll give you a good fight all the time."



IN THIS CORNER—Al Garza, Tool Control Norcrafter, is a rising star in LA fight circles. A welterweight, Al is two-time Golden Gloves champ and took Catholic Youth Organization championship for three consecutive years. Al comes from battling family—see story this page.

LATEST WORD



SLEEK SLOOP Scimitar is pictured in Acapulco waters during 3-month sojourn. Manned by NRC Boat Club members Larry and Cleota Pugsley, Hank Young, and Ed Boden, the Scimitar started on round-the-world cruise in October (story in Northrop News November 9 issue). Next port-of-call will be San Salvatore, then on to Galapagos Islands.

Keglers Roll For Spring Tourney—Top Wins Told

The 4th Annual Spring Bowling tourney rolled to a smashing climax last month and the tally of points netted wins to the following contestants.

Men's All Events—A. G. Coleman took first place with a total of 1890 points; W. W. Chamberlin, second, 1766; R. E. Noll, third, 1764.

Men's Singles—A. G. Coleman was first again with 661; P. F. Schlue, second, 640; A. A. Boshear, third, 625.

Men's Doubles — O. Brenner and N. Bailey, first, 1238; R. Varay and R. Noll, second, 1228; R. Lieber and G. Grimm, third, 1220.

In the team events the Missiles took first place with a total of 2999 pins, the Five Pick Ups totaled 2932 for second, and the Handicappers placed third with 2901.

On the distaff side — Irene Langland, Jean Ward, and Dorothy Grimm placed first, second, and third—in that order—in the Women's All Events with 1811, 1746, and 1741 respectively.

Women's Singles winners were Marian Marta, first, with 628; Patty Clifton, second, 615; Betty Broberg, third, 614.

Women's Doubles — J. Moniz and L. Smith took first with a total of 1169; A. Kinney and D. Harvay, second, 1144; and D. Wirthman and J. Sittauer and D. Grimm and M. Lieber tied for third with 1135.

The winning women's teams were The Bags with 2872; Night Chicks, 2850; and Quintesses, 2845.

Mixed Doubles events netted wins for F. Schlue and E. Lohry, first place, 1209; A. Christian and R. Chistrian, second, 1203; M. Marta and F. McLarney, 1202

Mixed Teams — Alley Cats, first, 2896; Team no. 41, second, 2774; Dodgers, third, 2767.

NRC Good Time Table for June

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784.

NOTE: All Clubs meet at NRC Clubhouse, 175 N. Hawthorne Blvd., unless otherwise indicated. Names noted are of commissioners, acting commissioners or representatives.

ART CLUB (days), Joe Kalina
Meet in Annex every Thursday evening, 7-10 p.m. Life class—models furnished. Planned weekend land and sea scape painting parties.

BIBLE STUDY, Roy Stahl
Meet daily, Plant 1, east mezzanine conference room, 11:15 a.m.; Plant II, Mon. and Thurs., Conference Room II; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ralph Cook
Annual Memorial Day Cruise, June 2 and 3. Meet 1st Wednesday of month. Next: June 6.

BOWLING (days), Wayne Chamberlin

BOWLING (night), Garland Steiner
Summer leagues now in progress.

BRIDGE CLUB, Tom Coates
Meet 2nd and 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Scott Budge
Meet in Annex 1st and 3rd Friday of month, 7:30 p.m. Next: June 1. Hawthorne-Anaheim competitions at N.R.C. Clubhouse, Anaheim, Saturday evening, May 26, 7:30 p.m.

CAMERA CLUB (nights), Gene Beck
Meet 1st and 3rd Saturday of month. Next: June 2, 7:30 p.m.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30 p.m. Next: June 20.

FISHING (day and night)
Register all fish for NRC awards with cards supplied by Personnel Activities.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next: June 27.

GOLF (days), Lee Johnson
Summer leagues in session.

GOLF (nights), Pete Lower
Summer league playing at Western Ave. Golf Club.

GUN CLUB (days), Bob Kalkofen
Meet 1st and 3rd Tuesdays, 7:30 p.m.

MIXED CHORUS, Bill Porter
Meet every Tuesday, 7:30 p.m. Entertainment schedule: May 25: Inglewood Musical Festival; June 15: Missouri Society: June 16: Air Force—Chapman Park Hotel.

MODEL CRAFT CLUB, Bill Feldt
Meet first Monday of month, 7:30 p.m. Next: June 4, Model Glider contest.

MODEL RAILROAD, John Felder
Now located in new building at 4225 W. Manhattan Beach Blvd. Meetings Thursday evening, 7:30 and Sunday mornings, 10:00 a.m.

PHILATELIC CLUB, George Borton
Combined philatelic and numismatic meets 2nd and 4th Mondays, 7:30 p.m. Juniors welcome.

RADIO CLUB, Paul Serafin
Meet last Thursday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening, 7:30 p.m. New equipment has been purchased for transmitter and receiver.

SKATING CLUB (nights) LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday evening, 7:30 p.m., Redondo Skateland. Skating party and picnic, Sunday, June 3, at Skate Ranch, Main Street & Freeway in Santa Ana, 1:30 to 4:30 p.m.

SKEET CLUB, George Swanner
Meet every other Saturday at Long Beach Gun Club, 10:30 a.m. Next: June 9.

SKIN DIVING (days), George Branch
Meet 3rd Monday of month, 7:30 p.m. Next: June 18.

SKIN DIVING (nights), Bob Larson
Meet 3rd Wednesday of month, 1 p.m. Next: June 20.

SOFTBALL (days), Dave Heaps
Leagues now playing Mon. & Wed. at Rosecrans Playground, Tues. & Thurs. at St. Andrews Playground from 6:00 p.m. to 10:00 p.m.

SOFTBALL (nights), Dave Carney
Leagues now playing Mon. through Friday at Rosecrans Playground, 10:00 a.m. to 12:00 noon.

SPORT CAR CLUB, Bill Hanna
Meet 2nd Thursday of month, 7:30 p.m. June "Mad Hatter" Rally to be announced.

SQUARE DANCING, Angie Allen
Meet at Swimm's Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th and 5th Sundays.

SURF FISHING (days), Ed Rodish
Meet 1st Tuesday of month, 7:30 p.m. Next: June 5.

SURF FISHING (nights)
Meet 1st Wednesday of month, 1:00 p.m. Next: June 6.

TOASTMASTERS (days), Henry Cooper
Meet every Thursday evening, 6:30 p.m., "The Cockatoo."

TOASTMASTERS (nights), Sam Grutsis
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m. Next: June 26.

EXCLUSIVELY FOR THE LADIES

BOWLING, Lee Hopkins
Women's league at Inglewood Bowl on Thursday evening at 6:15 p.m.

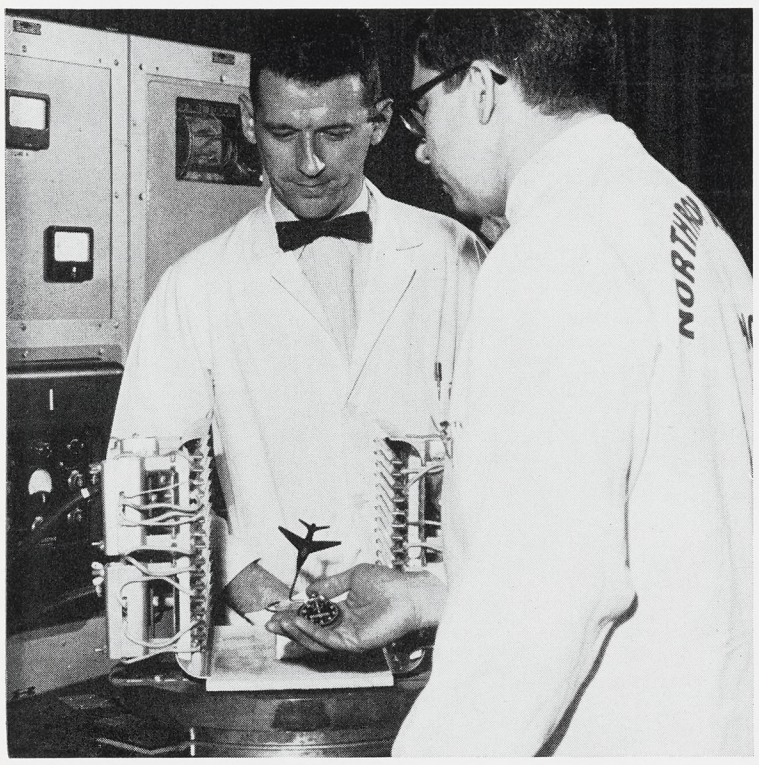
INTERIOR DECORATING
Classes meet every Thursday evening, 7:30 p.m. Instructress furnished. Lamp shade class now in progress.

KNITTING, Thelma Martin
Meet every Monday evening, 7:30 p.m. Craft Room, NRC Clubhouse.

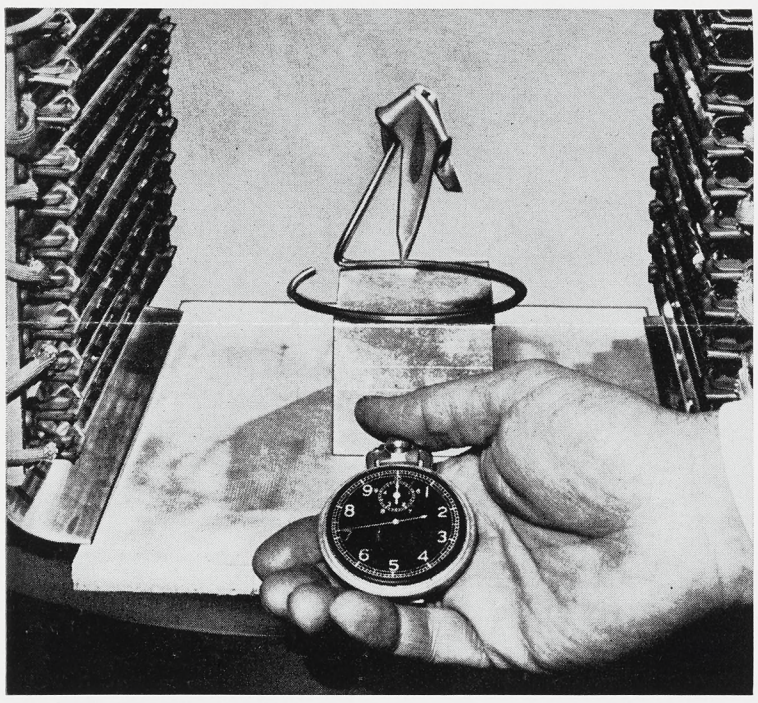
SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet every Tuesday, 7:30 p.m. Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS, Hettie Horner
Meet in NRC Clubhouse Board Room 1st and 3rd Thursday evenings for dinner meetings, 7 p.m.

Super-Sonic Heat Wave



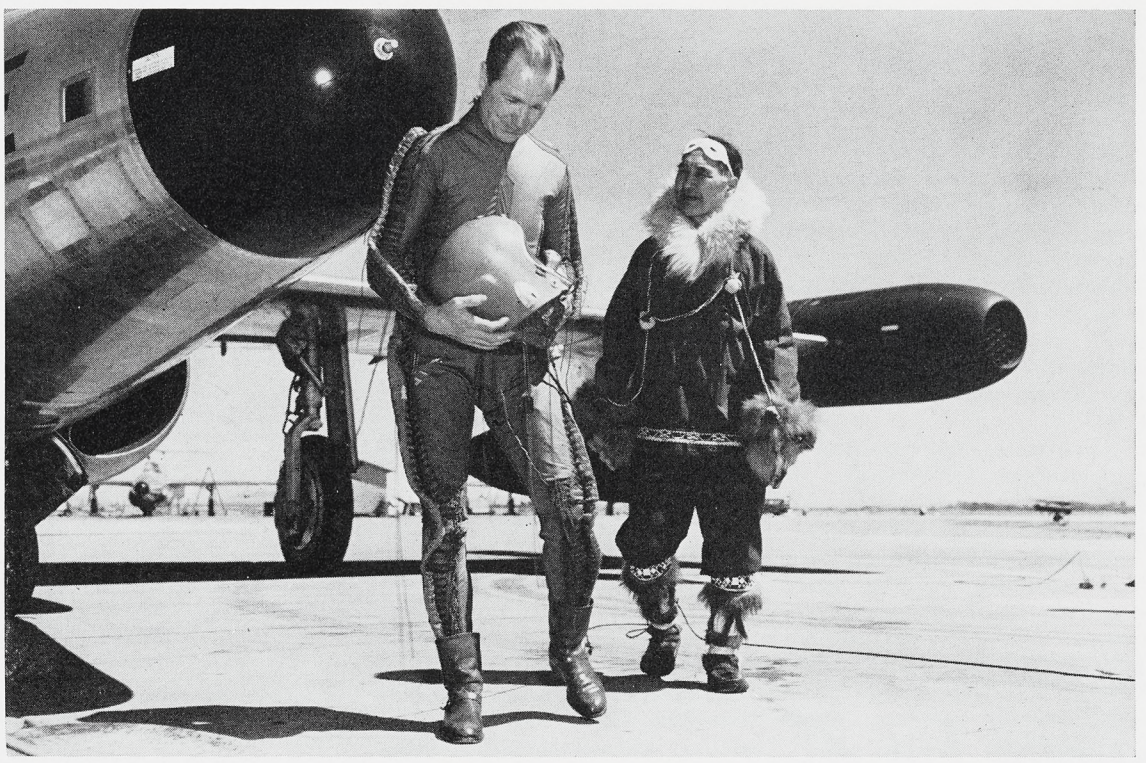
NORTHROP ENGINEERS R. C. Geiger and Irv Sherlock demonstrate effects of heat caused by friction of airplane moving through air at high speed. "Thermal barrier" demonstration shows infra-red quartz lamps flanking cut-out airplane. Lamps throw up to 2000 degrees heat on small cut-out, made of standard .051 aluminum alloy.



JUST SEVEN AND A HALF seconds after current was turned on, small model hangs limply. At four seconds the cut-out had begun to wilt. Engineers use tests like these in search for metals which will withstand heat of thermal barrier. Stainless steel used in some applications can withstand temperatures up to 3000 degrees.

PHOTO FEATURE:

Northrop News Pictorial



Best Dressed Men Are Wearing . . .

CRAZY MIXED UP SUIT—. Asagook Seveck (Chester for short) in Eskimo version of the Ivy League look gazes pityingly at Northrop experimental pilot Rod Close attired in uncomfortable space suit. Chester, 66-year-old reindeer herder turned tour guide, visited Northrop during tour of Pacific Coast on Arctic Alaska publicity trip. Chester received wide-spread attention via TV and radio appearances, lives in Kotzebue, Alaska, small village north of Arctic Circle. He was accompanied by an Alaskan pilot.

Tender Touch

EFFORTS REWARD — Grand finale to NRC-sponsored lamp shade making class was impressive showing by ladies of fruits of their labors. May Brown, June Letcher, instructor, Pete Stockwell, and Dorothy Baldwin (l. to r.) admire one of shades Pete made. New classes are now in progress. All Norcrafters and their wives are invited.

Ray Tenhoff

GROWING professional organization is Society of Experimental Test Pilots, organized only recently by representatives of aircraft companies in Southland. One of prime movers in organization activity was Ray Tenhoff, Northrop Experimental Flight Test pilot, shown addressing one of the opening meetings held in Palmdale. The group, dedicated to progress of profession of test flying, increased safety, and exchange of information within security and proprietary limits, has tripled membership since meet.

Add Style Note

SIMILARITY in helmets motorcycle officers and pilots wear is more than coincidental—police headgear was modeled somewhat after that worn by pilots. Captain James Anthony, AF chief of Flight Test and Acceptance at Palmdale, compares two with Officer Robert Pierce, ten-year veteran of the Los Angeles Police Department.

CONCENTRATED in this one small unit are all the controls necessary to operate "Earthquake Ernie", new guided missile shake test device developed by Northrop. A Northrop technician turns the frequency control dial while Co-designer Paul Stevens reviews testing procedure.

PROGRESS REPORT

"Earthquake Ernie" Can Simulate Launch Shock

Payoff Snark switch via substitution of shakes from morning after to morning before, figuratively speaking, has been announced.

A midget test device, dubbed Earthquake Ernie, does the job. Ernie generates force equal to an automobile crashing into a brick wall at 60 miles an hour during one-tenth of a second. Snark electronics and guidance elements are vibration tested with this shake-down technique during manufacture and before launch.

The shaker is no larger than a soapbox, uses no more current than a common household electric iron and is many times smaller than previously developed shake devices. It can apply a force of 55 G's to guided missile electronics weighing more than 1000 pounds.

"Ernie" was built to assure high performance of Northrop's Snark SM-62 intercontinental guided missile, photographs of which were recently released to the public for the first time. (See Northrop News—February 29).

The boxlike device, which measures less than one cubic foot in volume, was developed essentially to test the effects of frequency vibrations ranging from five to 600 cycles per second.

Prior to Ernie only small subassemblies and individual electronic black boxes could be shaken with existing vibration equipment. In addition, it was found that the more powerful magnetic shakers available affected sensi-

(See EARTHQUAKE, page 3)

Management Club Plans Tour of El Toro Base

U. S. Marine aircraft activities will be viewed by Management Club members on Saturday, June 30, when they visit the El Toro Marine Air Base.

The tour will be a father and son program, MC Education Chairman Ken Davidson—who made the arrangements — announced. But he added that the father-son plans do not exclude members without heirs.

The touring party will see a helicopter demonstration; training unit facilities, including Link trainers; and a cold weather survival display, Brigadier General A. W. Kreiser, commanding general of the base, told Davidson.

In addition, the general said, several brand new F4D Skyrays may be at the station by that time, giving Management Club visitors an early close-up look at this latest jet addition to the Marine Corps arsenal.

Arrangements are being made, Davidson said, to offer luncheon at the base mess at a very low cost figure. The tour is scheduled to begin at about 9 a.m., and to conclude with the lunch.

Application forms will be sent to members next week.

Among Northrop's Giants

MASSIVE new machine in Northrop shops is this Keller duplicator, located near wing line at east end of Machine Shop. George Norwood, nights, is operator shown at electronic controls, which are on two deck levels. Equipment fashions pieces (lower diagonal root rib shown) to duplicate pattern (top diagonal piece). Small tracer (circle) follows pattern, controls cutting tool below.

SIGHT CALIBRATION

Flight Tests Focus on Eyes

The eyes have it in a current series of tests Experimental Flight Test Norcrafters are running.

The eye portion is only the beginning of a broader study to be made for Aero-Medical Laboratory as part of a still broader program of low altitude gust research.

Low level attack missions of the future will benefit from the studies, as Northrop personnel discover, in the test program, how often the aircraft will encounter gusts while swooping low over the terrain.

When a pilot is hugging the ground at close to sonic speeds,

BY AIREPORTER

his life depends upon his alertness. And much of his alertness depends, in turn, upon his eyes.

How often does he shift his glance from one instrument to another? How frequently will he peer from horizon to panel to horizon again?

The patterns can be measured.

And the measurements and records may indicate what designers can do to make the pilot's job an easier, safer one—and thus to insure that man and machine are at their most efficient together.

Here is where the camera—whose use has been broadened so tremendously in the past few

(See FLIGHT TESTS, page 2)

Northrop News

NORTHROP ®

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, June 6, 1956

Structures Aid Helping NACA In Its Research

Contributions of Northrop engineers to a vital research program of the National Advisory Committee for Aeronautics have been revealed in a recent news release from NACA.

The release, announcing further research into gust-meteorological conditions at high altitudes, said the planned work was along lines recommended by the Gust Loads Research panel

(See NACA, page 2)

Three Daily Flights Now Being Made to Desert

Passenger operations of the "Bamboo Fleet" have reached a new crest of activity, resulting in a stepped-up schedule of three regular flights daily on the Hawthorne-Edwards-Palmdale run.

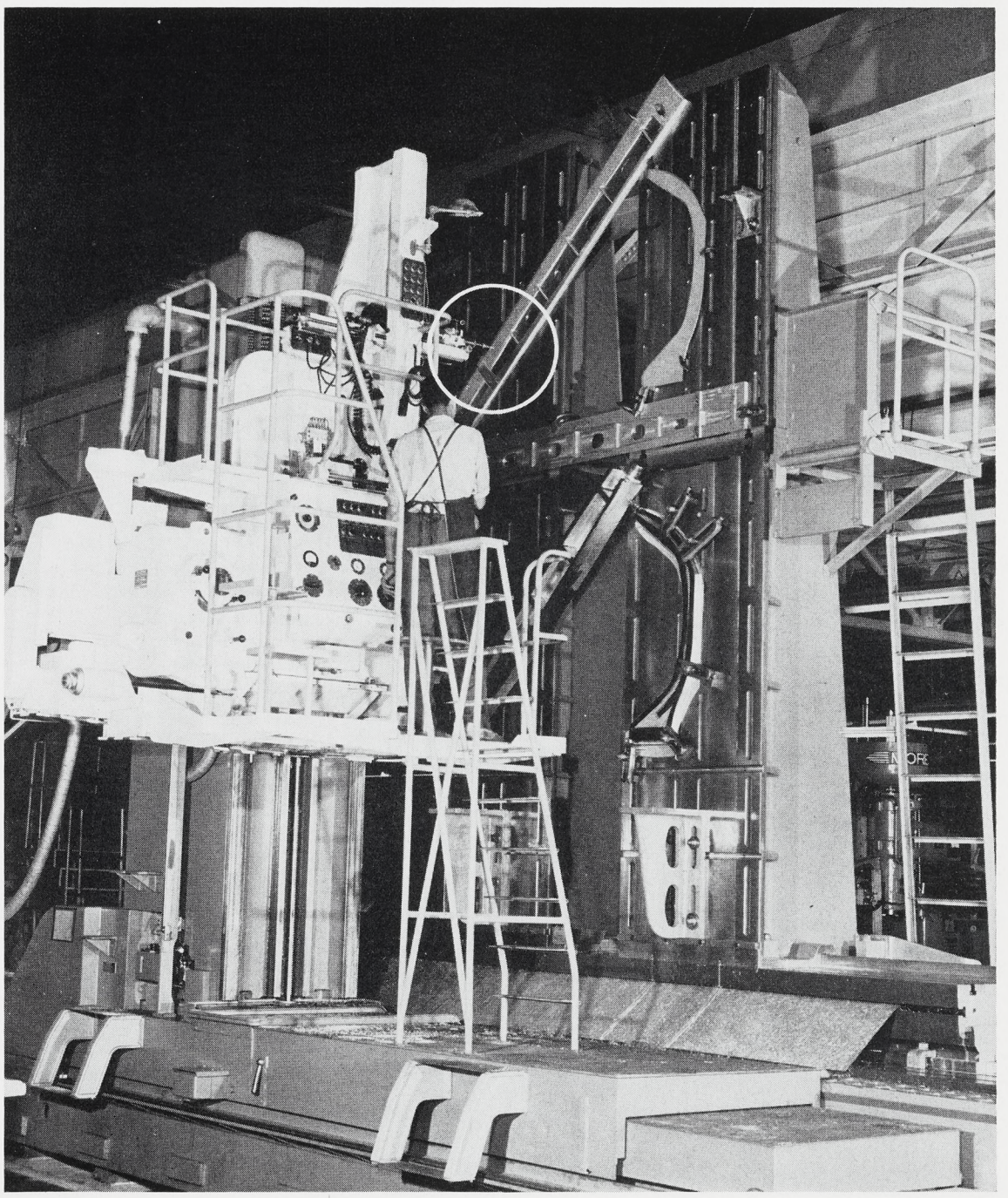
During a recent month the company's DC-3 and Twin Beech carried close to 1200 passengers to and from the desert facilities, making approximately 350 takeoffs and landings.

The increased loads reflect the high pitch of test activity at Edwards, and 75 to 80 per cent of the morning passengers make that their destination. Test programs on the H and J series Scorpions, plus those involving research and development, have boosted Edwards operations to an all-time high.

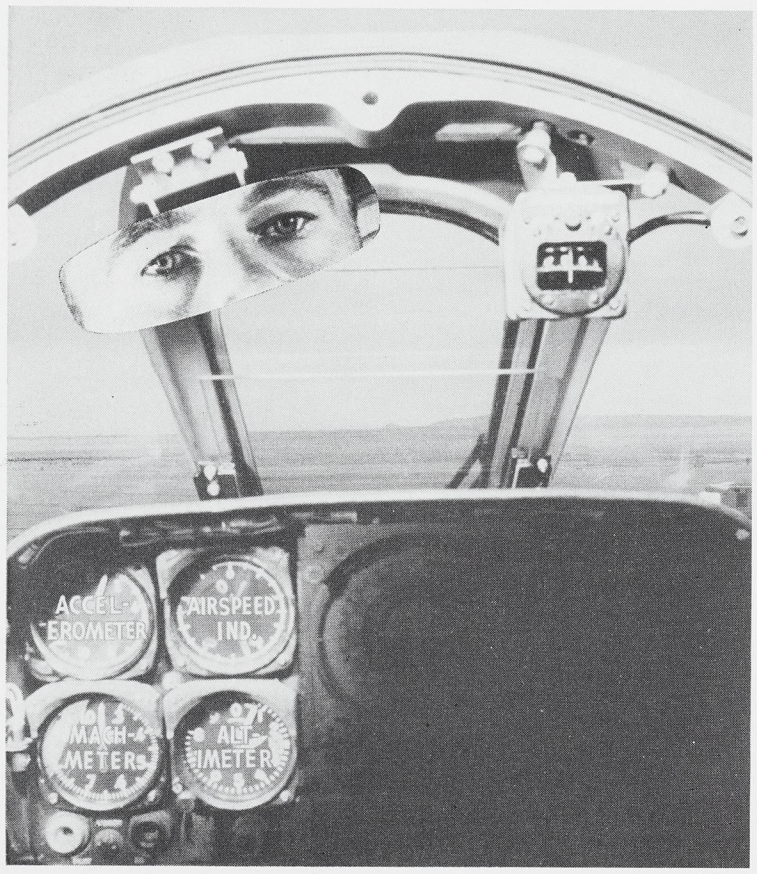
The fleet was regularly flying two trips to Edwards and Palmdale, but found that a third was so often necessary that it was added to the regular schedule. Now takeoffs from Hawthorne are made at 8 a.m., noon, and 3 p.m.

Majority of the passengers us-

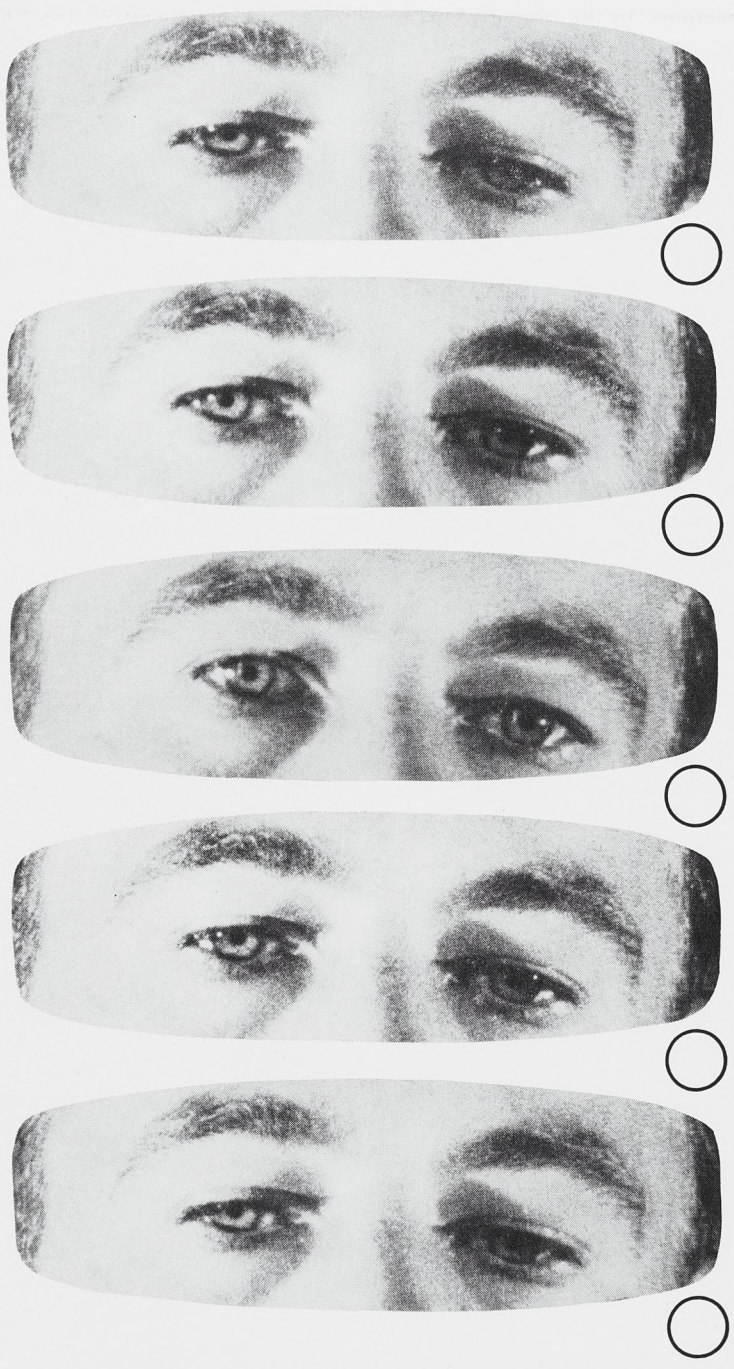
(See FLIGHTS, page 2)



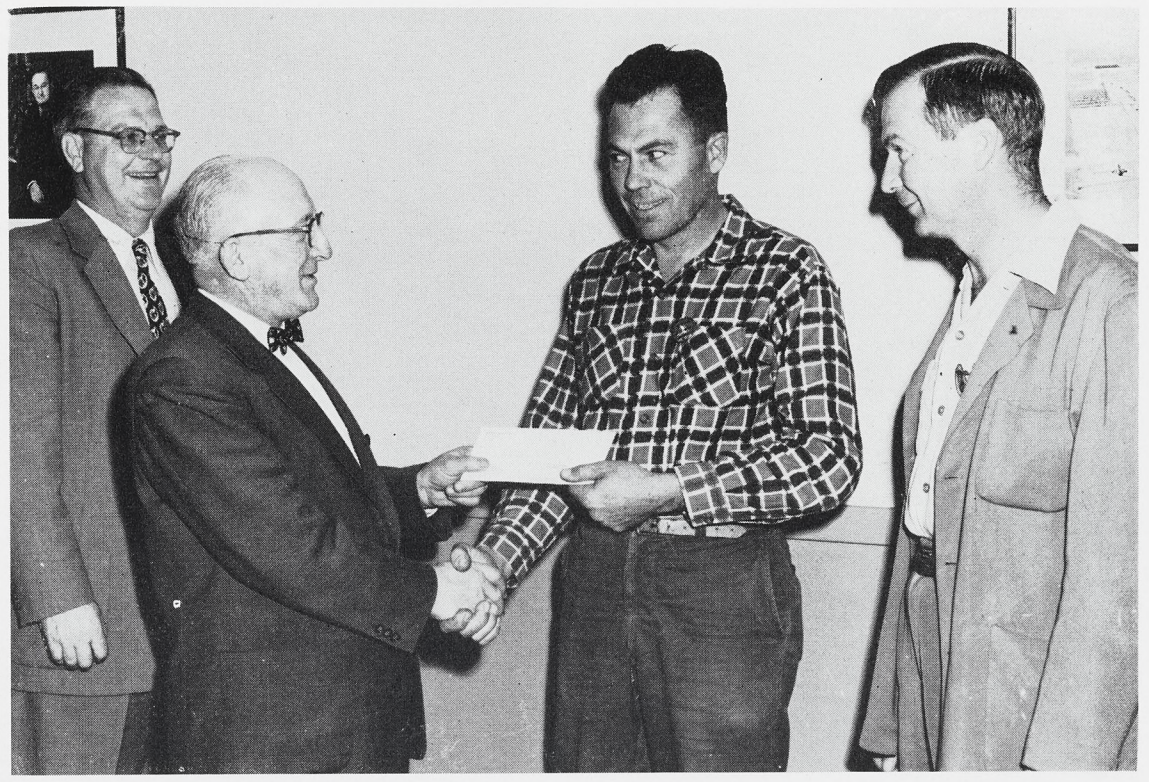
Eyes Right? Left? Test Your Perception



WHERE IS pilot looking in each picture? Five mirror-reflected photos below show pilots eyes looking at part of Scorpion instrument panel (above). View through windshield and glances at altimeter, accelerometer, air speed indicator, and machmeter are involved. Photos are not in sequence. Idea is to note in circle provided which glance is aimed at what indicator. Answers on ad page—p.4. Test your skill. (Detailed story, page 1.)



(ANSWER ON PAGE FOUR)



SUGGESTION turned in by N. E. Lindsay at Palmdale recently paid off in form of company check, shown being presented to Lindsay by Tom McCracken, base administrator at Palmdale. At far left is Chuck Beauchat; on the right, L. P. Hickman.

JOHN BRUMFIELD TO HEAD FLIGHT OPS, HOLLOMAN

John F. Brumfield has been named manager of the Northrop-Radioplane Holloman Operations, Flight department, recently established at Holloman AFB, New Mexico.

The Northrop operation was set up to support Radioplane flight test programs, an earlier announcement said, and includes, in addition to the Flight department, Tool Cribs and Tool Stores, Manufacturing Control, Flight Service, and Quality Control. The operations will be under the direction of the manager, Northrop-Radioplane Holloman Operations, Flight department.

Brumfield is the company's first missile pilot (remote), and holds the distinction of being the first to fly the F-80 for Air Force pilots in the Pacific theater.

NACA

(Continued from Page 1)

headed by R. B. "Bud" Davidson, assistant chief of Structures.

The panel had been appointed by the NACA Subcommittee on Aircraft Loads, of which Davidson is a member, to review and assess past, present, and planned programs for gust loads research in light of current design trends.

On the basis of the assessment the panel was instructed to recommend new and expanded programs in the field.

Its report, soon to be released, will make about 25 specific recommendations, including the one referred to above. A number of these are expected to result in major research programs by NACA and other government agencies, including military.

Six men comprised the panel, with Davidson as chairman. There were engineers from two other aircraft companies, plus representatives from WADC (USAF), Navy BuAer, and NACA Langley Laboratory.

Davidson credited two Norcrafters with providing invaluable assists to the panel's studies, naming Innes "Buzz" Bouton, supervisor of the Loads section, and Dave Badger, engineering specialist in Structures Research.

Studies by Badger on convective clouds and high altitude turbulence were particularly effective in showing the need for more research in these fields, the chairman said.

Flight Tests Focus on Eyes

(Continued from Page 1)

years—performs a valuable service. It shows—painstakingly and accurately—where the "driver's" eyes are moving . . . and when . . . and how often.

The preliminaries have already begun. The first series of stills are on this page—a series taken while the subject looked first at the horizon, and then, in turn, at four instruments on the panel of a Scorpion.

Like aerial map reading, it takes practice to determine which picture shows which glance. But Experimental Flight Test people are becoming adept at it . . . and just for practice will shuffle the photos around, and then rearrange them in proper order. (The reader can test his own ability on the pictures, this page)

The eye camera used to furnish pictures—just like those shown—will be one of three used in the Aero-Med portion of the low level gust research flights. The other two cameras show body movements and the view the pilot sees through the windshield.

The cameras are synchronized to correlate eye and body movements and the view ahead. Time coding on each frame of the films provides a common reference point, so that in the interpretation of the results it is possible to tell at just what stage of the flight, and at what particular time, the pilot performed the operations photographed.

Other types of instruments will show the vibration level at the pilot's seat; will measure how much effort the pilot need exert on the stick and rudder pedals; will determine the noise level about a foot away from the pilot's head.

All this is supplementary to the instrumentation used in measuring the effect and strength of gusts at tree-top altitudes.

The first trials will take two or three months. The F-89D to be used is being instrumented now by Experimental Flight Test personnel, and the airplane readied by Advanced Production.

If the first trials show the tests to be feasible, a longer program will follow—about a year and a half of flying through different climates and over varying terrain. When the program is ended, the answers will all be there.

Flights . . .

(Continued from Page 1)

ing the service are Flight Test personnel, Engineering and Manufacturing reps, and Air Force delivery crews. Some AF personnel carried back to Hawthorne are the pilots of Scorpions brought to Palmdale for modification to J-airplanes.

In running about 13,000 miles monthly, the Bamboo Fleet is still keeping intact its long safety record, with Orbie Blair and Bob Johnson and their crews maintaining the ships in A-1 condition. Dispatching and coordination of the flights is being handled by Buzz Carrol at Hawthorne; regular pilots on the DC-3 are Jack Miller and Ed Hahn.

Along with the increased frequency of passenger trips, there has been growing use of the airplanes to carry in-company mail, until now all Edwards-Hawthorne company correspondence is via company air mail.

Northrop News

Vol. 10 Northrop Field, Hawthorne, Calif. No. 20

Published every other Wednesday
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

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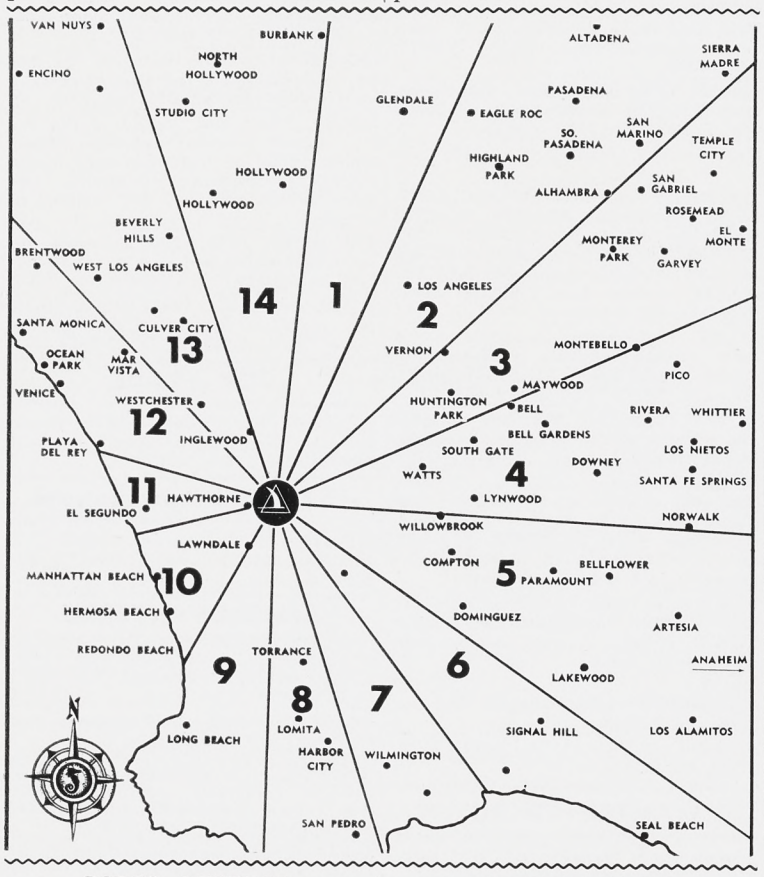
News office phones—2456, 2457, 2732. Outside lines—OR 8-9111, OS 5-4611.

"Going My Way" forms are available from department clerks at all Northrop facilities, from PA offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Wednesday before publication.



RIDES OFFERED

7:30 a.m. — 4:15 p.m.

(Zone 5)
HARBOR BLVD. & TRASK, Garden Grove. (Car pool desired.) D. C. BERGH (3551-40468, Ext. 565). 13-5

(Zone 7)
VERMONT & 182ND, Gardena. GRACE MATHEWS (4110-1375, Ext. 2331). 13-7

(Zone 13)
CORBIN & SHERMAN WAY, Reseda. (Will also pick up at Sepulveda and Ventura, Sherman Oaks.) GERALD F. RABIDEAU (3541-83456, Ext. 464), DI 8-3270. 13-13

SEPULVEDA & SANTA MONICA BLVD., Los Angeles 25. (Car pool considered.) RICHARD W. KING (3410-33809, Ext. 400). GR 7-1937. 3-13

7:30 a.m. — 5:15 p.m.

(Zone 4)
IMPERIAL HIGHWAY & ATLANTIC, Lynwood. (Car pool desired.) D. T. WILSON (3273-30186. Ext. 1224), NE 1-9413.

(Zone 5)
WASHINGTON BLVD. & ROSEMEAD, Whittier. (Route via Rosemead, Imperial, Alameda, El Segundo.) DONALD D. MYERS (1810-43969, Ext. 2024), OX 2-2550. 14-5

4:45 p.m. — 1:15 a.m.

(Zone 4)
BROADWAY & 105TH ST., Los Angeles. (Want a ride or will rotate with my car.) M. L. EDMISTON (5621-19130, Ext. 2649). PL 5-7953. 8-4

Miscellaneous - (Split Shift)

(Zone 13)
HAWTHORNE & LENNOX BLVD., Inglewood. (Hours: 4:15 p.m. to 12:45 a.m.) IRENE BARB (3141-44329, Ext. 403, 457), OR 1-8991. 10-13

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)
OLYMPIC & HOOVER, Los Angeles 6. SAM SAKI (5587-41862, Ext. 2731), DU 4-2637 or DU 2-3952. 2-1

(Zone 4)
CRESCENT & LIME CIRCLE, Buena Park. GUY FLECK (5501-40590, Ext. 2200) 2-4

(Zone 5)
MAIN & 17TH, Santa Ana. FRANK KENNEY (5336-44154, Ext. 2256, 1978).

(Zone 8)
TORRANCE BLVD. & CRENSHAW, Torrance. (On corner Amapola & Torrance Blvd., 4 blocks from Crenshaw.) CAROL SHEPARD (6335-25937, Ext. 1649), FA 8-1602. 2-8

(Zone 9)
MANSEL OR HAWTHORNE BLVD. & 154TH, Lawndale. CARRIE HORTON (5508-19492, Ext. 2755). OS 5-5246.

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 12)
LENNOX & ANZA BLVDS., Lennox. (Could meet at Imperial & Anza or Inglewood & Lennox Blvds.) HARRY J. NIKKEL (5508-19565, Ext. 2764), OR 7-0402. 2-12

7:30 a.m. — 4:15 p.m.

(Zone 4)
SAN GABRIEL & SOUTHERN AVE. OR TWEEDY BLVD., South Gate. SHIRLEY A. FELIX (3820-23587, Ext. 1293, 1294), LO 6-1874. 3-4

(Zone 5)
HARBOR BLVD. & TRASK, Garden Grove. (Car pool desired.) D. C. BERGH (3551-40468, Ext. 565). 3-5

(Zone 6)
WESTERN AVE. AT COMPTON, Gardena. (I am badly in need of a ride 5 days a week.) CLINT KUHN (5970-25105, Ext. 2161), DA 4-0253. 3-6

(Zone 7)
VERMONT OR NORMANDIE & 190TH, Gardena. PATRICIA DOTY (8620-44215, Ext. 2629), DA 4-9333. 3-7

(Zone 8)
GAFFEY & 14TH, San Pedro. ROSEMARY MORRIS (3143-14215, Ext. 454), 3-8

CRENSHAW & 190TH, Torrance. JULIA EVANS (9320-42958, Ext. 1416) DA 4-2804. 3-8

(Zone 9)
TORRANCE BLVD. & LUCIA OR MARIA, Redondo Beach. JIMMY VATTIMO (9350-43200, Ext. 2055). FR 2-3701. 3-9

(Zone 10)
RINDGE LANE & 190TH ST., or Ripley & Blossom Lane, Redondo. JEAN ECONOMAKOS (3420-12207, Ext. 1815). OR 1-4361. 3-10

(Zone 12)
COAST HIGHWAY & MANCHESTER, Playa Del Rey. JEAN CHURCH (8320-37306, Ext. 1832), EX 8-0925. 3-12

(Zone 13)
CORBIN & SHERMAN WAY, Reseda. (Will also pick up at Sepulveda and Ventura, Sherman Oaks.) GERALD F. RABIDEAU (3541-83456, Ext. 464), DI 8-3270. 3-13

SEPULVEDA & SANTA MONICA BLVD., Los Angeles 25. (Car pool considered.) RICHARD W. KING (3410-33809, Ext. 400). GR 7-1937. 3-13

(Zone 14)
CRENSHAW AND 104th ST., Inglewood. CAROL L. VEAL (9330-44335, Ext. 2228). OR 2-6677. 3-14

7:30 a.m. — 5:15 p.m.

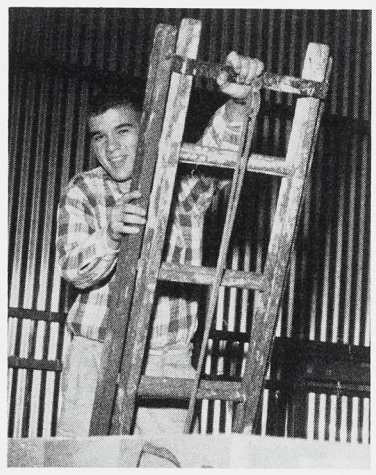
(Zone 4)
IMPERIAL HIGHWAY & ATLANTIC, Lynwood. (Car pool desired.) D. T. WILSON (3273-30186, Ext. 1224), NE 1-9413.

Joseph Kroll: No. 1 Happy D. C. Visitor

Any way you look at it, a young man named Joe Kroll was probably the happiest visitor in Washington, D. C., last month. Joe's trip was free, and, what's more, it was in the nature of a reward (which made it doubly enjoyable).

Joe is a young Norcrafter who works nights in Final Assembly Control (5374), and goes to Hawthorne High School days. He was chosen Hawthorne "Boy of the Year" by the Exchange Club, thus qualifying for state competition.

"When my name went up for state award," Joe said, "I forgot about it. I figured the city one



JOE KROLL, young man on his way up long ladder . . .

was all I could expect to get."

Joe figured wrong. He was chosen California Exchange Clubs' "Boy of the Year", and the all-expense paid trip to Washington went with it.

All-around ability and scholarship won the young man his honor. Joe is not only a good student, but also a top-notch football player. He has played on the baseball team, been active in drama and school government affairs, and Boy Scouts.

There was no doubt about his scholarship. A week before he learned of his Exchange Club award, Joe found out that he had won one of four local area scholarships awarded by North American, where his father works. The five-year scholarship is worth over $5000; Joe will use it to study electrical engineering.

And, more recently, Joe added new laurels—a Bank of America award for his outstanding school performance!

A FINAL CHECK on a test setup utilizing Northrop Aircraft's new "Earthquake Ernie" guided missile shaker is made by co-designer Paul Stevens.

RIDES WANTED

4:45 p.m. — 1:15 a.m.

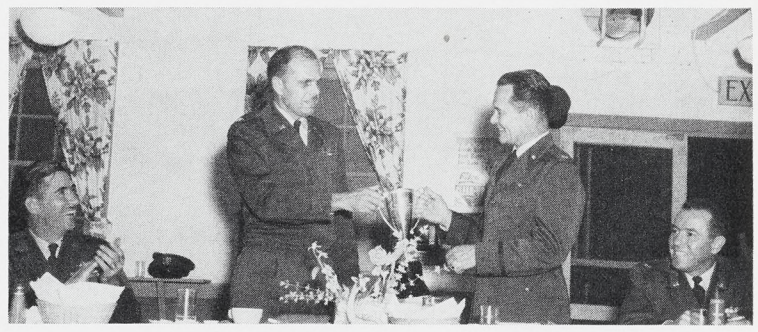
(Zone 4)
BROADWAY & 105TH ST., Los Angeles. (Want a ride or will rotate with my car.) M. L. EDMISTON (5621-19130, Ext. 2649). PL 5-7953. 8-4

(Zone 8)
PALOS VERDES DRIVE & WESTERN, Lomita. BILL ARMATA (5421-43166, Ext. 2242) 8-8

Miscellaneous - (Split Shift)

(Zone 9)
INGLEWOOD AVE. & 190TH ST., North Redondo Beach. (Hours: 5:15 p.m. to 1:15 a.m.) LOIS HERMAN (5353-35969, Ext. 1627). 10-9

58th FIS Cops Trophy In Wing Rocketry Meet



ROCKETRY trophy went to 58th at victory dinner. Col. Hilmer Nelson, 4707th ADW commander, gives award to Lt. Col. John DeLapp, 58th CO. Left: Col. Fred Hook, base commander, 33rd Fighter Group; right: Col. Allen E. Buchanan, deputy base commander. Story follows.

Proud is the word for officers and men of the Scorpion 58th Fighter Interceptor Squadron, Otis AFB, Massachusetts. They have won the honor of representing their Wing — the 4707th ADW—it is reported to the News by Northrop Tech Rep Ray DeYoung of that base—in the forthcoming 26th Air Division meet.

Ahead, through many meets, division and command, for the most skilled pilots and crews will be the coveted privilege of competing against world-wide USAF rocket experts at Yuma, Arizona, for the rocket championship of the Air Force.

Competing with the 58th, other 4707 squadrons were 60th FIS—F-94C, and a composite team from the 2nd, 5th, 49th, and 337th—F-86D.

Total points were: the Scorpions—9400; the Sabers—7800; the Starfires—3400. The Starfire 60th conceded the meet before completion of their allotted sorties.

Pilots and ROs of the 58th and the scores they made:

Lt. Col. DeLapp/Lt. Herce....3000
Capt. Beebe/Lt. Cole.....2000
Lt. Jarvis/Lt. Keener.....3400
Lt. Shaw/Lt. Hildebrand.....1000

(Each crew shot off one target apiece).

Earthquake Ernie . . . .

(Continued from Page 1)

tive instrumentation in the electronic components. Northrop's new device not only allows large sections to be tested, but precludes adverse affects on electronic units by substituting hydraulics for magnetic force.

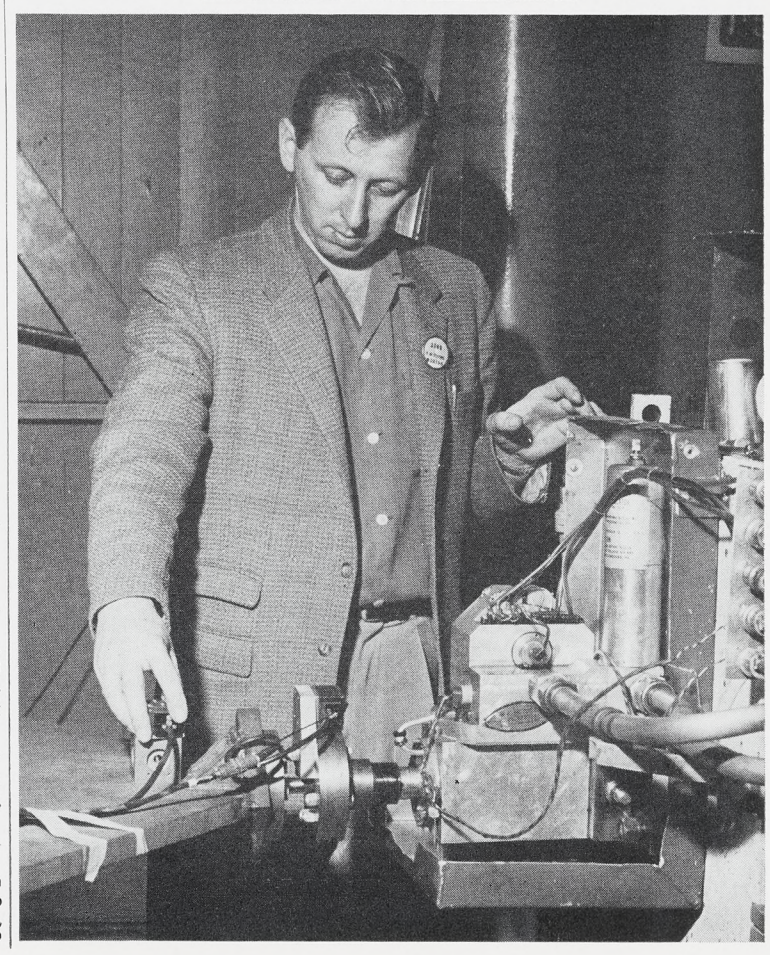
Heart of Northrop's new test device is a two-stage electro-hydraulic servo valve built especially for Northrop by the Bertea Products Co., of Pasadena.

"Ernie" is mounted on a 10,250 pound lead weight, which adequately resists the thrust of its vibration action and allows almost 100 per cent of the motion to be transmitted directly.

Power is from a 75-horsepower U. S. Electric motor, driving a Dennison hydraulic pump.

Ken Yost, supervisor of Northrop's hydraulic test section, and his crew of development engineers are now working on an automatic control system for "Ernie", which will automatically sweep the frequency ranges of the device and even further improve the efficiency of the shaker.

The device was conceived as a new test facility by engineers responsible for vibration tests of large magnitude. Design engineers were Paul Stevens and Mitch Krause. "Ernie's" development was the responsibility of Kent Proctor, Northrop project engineer on the vibration tester; Joe Wilson, hydraulic engineer; Lee Beydler, system engineer, and Jean Gregor, systems technician.



BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

Use regular Barter, Buy, Sell or Free Form 19-308 (10-53) available from stationery stockrooms, department clerks, Northrop News office, Personnel Activities, plant lobbies.

Ads will be run one time only. If you wish the ad repeated, please fill out another form and forward to the Northrop News Office, Department 1320, Zone 20.

Box numbers will be provided to Norcrafters who do not have home phones or who do not wish calls. Replies to box numbers are to be in writing. Box number replies will be forwarded by the News Office without delay.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday one week before publication.

FOR SALE

PUPPIES, cocker spaniel, 8 weeks old, AKC, reasonable. R. A. BARBER, DA 4-6216. A

TABLES, glass top, half moon end tables, matching coffee table; wrought iron TV STAND. FR 9-2657, after 1 p.m.

LOT, 40'x100', Crestline, gas, light, water, sewer available, $1000 or offer. OS 6-9462. A

HOUSE, 3 bedroom, rumpus room, tool shed, tennis court, fireplace, Hawthorne, $14,500. OS 6-8118. A

CHRIS CRAFT, 22', open, bait tank, pump, $2600. OX 2-4890. A

REFRIGERATOR, GE, 8 cu. ft., $55. PAUL J. ROGERS, PL 5-7310. A

CAMERA, auto. Rolleiflex, F/3.5 Tessar lens, $75. JOHN MIYATA, AN 3-8534.

BOAT, 16' inboard, Ford V8 engine, marine trans., trailer, $395. DA 9-1233, after 6. A

SPEED BOAT, 14', mahogany, new engine, trailer. EX 7-3841. A

RACING CHASSIS, quarter-midget, ¾ h.p. engine (Briggs & Stratton), complete except for body, $80. FR 5-5604. A

BICYCLE, girl's, Vulcan racer, 26". EDITH DARRAGH, FR 2-3893. A

PIANO, old fashioned. $95; matching PIANO STOOL, $5. FR 8-3423, evenings.

WASHER, Thor Automagic, dishwasher attachment, $40. C. W. SEXTON, OS 6-4449. A

OUTBOARD MOTOR, 2 h.p., Johnson, $30. EX 8-5039. A

HOUSE. 3-bedroom stucco, 3 years old, Torrance, $50 down and $25 per week, full price $8950, or will GI. TE 4-7305.

CAMERA, 4x5 Linhof Super Technika, 150 mm., and 90 mm. lens, reasonable; Chicago SKATES, boy's, size 5, $15. DA 6-7877. A

ROLLAWAY BED, twin, $10; White treadle SEWING MACHINE, $15; 2 TENNIS RACQUETS. $3 each; brass FLOOR LAMP. $6; OIL PAINTINGS, $3 each. OR 4-2623. A

FREEZER. Norge. Upright. 12 cu. ft., $200. M. R. HERDER, FR 4-0247. A

BOX SPRINGS, MATTRESSES for twin beds. $85. CR 6-7685. A

OLDSMOBILE. 1950. "88" 4-door. $400; 1953 Francis Barnett MOTORCYCLE, $350. Box 2007. A

MODEL A. 1932, roadster. V-60. 16" wheels. $245. C. E. SEWELL. DA 9-2639.

VACUUM CLEANER, Sears, Kenmaid, used once, $150; AUTOMATIC WASHER, GE. $190 or offer. OS 6-6164, 5-9 p.m.

SOFA, 8½'. $175; channel - back CHAIRS, $25 pair; LAMP 30". $12; tank-type Hoover VACUUM, $35; Kenmore upright VACUUM, $5. I. L. LOWERY, AX 2-6844. A

NASH. 1941 2-door sedan. $75. W. WRIGHT, EX 8-0461. A

NASH. 1951 Statesman 4-door. $175. WALDO P. CLOTT, DA 9-6923. A

LIVING ROOM SET. divan and chair, end table, $25. CAROL HAAS, OS 1-4789 A

FISHING BOAT. 19'. fiberglassed, two 25 h.p. Johnson motors, bait tank. W. L. COLLINS, AX 3-2719. A

REFRIGERATOR. 8 cu. ft. Westinghouse, $75. DA 4-8859, after 5 p.m. A

PRESSURE COOKER, 6-quart Presto. $18; GAS HEATER, automatic. $25. BLANCHE BUNSWICK. OS 6-5385. A

HANDLOADING SET, Lyman Ideal, for 12 ga. shotgun shells. C. F. ALLEN, FR 4-4515. A

DINETTE SET, chrome, four chairs. GRACE BARNHART, DA 4-7510. A

FREEZER, 20 cu. ft., Int. Harvester; Easy electric IRONER; 12'x18' wool hooked RUG; 2 brass ANDIRONS. R. B. ALGER. OR 8-6849. A

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

FOR SALE

MIMEOGRAPH MACHINE, Style, $45. J. H. MARTIN, TE 3-3709. A

WHEEL CHAIR, excellent condition, $50. F. G. NICOLAY, TE 0-5139. A

SKIL-SAW, 7¼" blade. $85; BINOCULARS, 8x30, coated lens, $15. OR 1-4867, after 4 p.m. A

MERCURY, 1949 4-door. $325 cash. CLAYTON C. ADAMS, DA 9-5804. A

MATTRESSES, Simmons twin bed, $49 each. FRANCES O'DANIEL, EX 8-8289.

MOTORCYCLE, 1944 Indian, $140. EA 2-9834. A

HOUSE, 2-bedroom, utility room, 1 car garage, $10,000, $3000 down or $1000 down and 2nd of $2000. AMOS BAKER, OS 6-6021. A

STUDEBAKER, 1954 Champion, $1000. A. S. McALLISTER. OR 1-8040. A

OLDSMOBILE, 1953, "98". PAUL E. FORD. OS 5-5304. A

HOUSE, GI resale, 3-bedroom, 1½ baths, partly furnished, fenced, near El Camino College. $13,900. WILLIAM J. HOFMANN. DA 4-0411. A

OUTBOARD MOTOR, Champion, 3-9 hp., $25. LEROY M. WACO, GL 4-4359.

GAS STOVE, 4-burner, $20; PHOTO ENLARGER. Omega D-II, $119.50; BUTANE SYSTEM for passenger car, light truck, 30 gal. tank, valves, $150. J. DON MORE, TE 0-4476. A

MOTOR SCOOTER, Doodle Bug. $30. M. D. PHILLIPS, TO 6-4450. A

CABIN CRUISER, 20', 100 h.p. Chris Craft motor, offer. FORD W. THOMPSON, OR 1-2776. A

OSCILLOSCOPE, 5" cathode ray. $29.50. FR 4-4994. A

CHEVROLET, 1946, $65. BILL L. DUNCAN. FR 5-8760. A

FORD, 1953, Country Sedan, 3 seat, $1245. J. D. WILLSON. EX 4-0540. A

TV, 16" Emerson console, $50. E. J. McGOVERN, OS 5-7414. A

PARAKEET BREEDERS. 16 pair, 20 nest boxes, feeders, aviary. $60. OS 5-9021, after 6 p.m. A

BUICK, 1955 Century Riviera coupe, $870 for equity, take over contract. OS 6-6390. A

KITTENS, Silver Persian. 6 weeks, registered, pedigreed. TO 4-3646, after 5:30 p.m. A

REFRIGERATOR. 9 cu. ft., GE, $145; 12½" Hoffman TV, table model. $25. PL 3-8944. A

PULLETS 12 N. H. Red, Childers 3A, layers. OS 6-5253, week days. A

BED DIVAN, matching CHAIR, $130 or offer. V. WALLACE. OR 4-4163. A

HOUSE TRAILER, 25' partly furnished, $250. J. A. BLACK, Box 2003. A

COLDSPOT, 7½'. $50. OR 1-4304. A

CHAIRS, occasional, $16; upholstered, $10; TABLES. small walnut, $3; six-leg lamp. $13.50. PL 5-2412. A

DODGE, 1948 4-door, $195. WM. PEDERSEN, Box 2002. A

FORD, 1955 4-door. $1495. Box 2001.

STUDEBAKER, 1950 4-door, Champion, $175. JIM OBBEMA OS 5-4333. A

CAR COOLER, $10. BEULAH M. GATTIAN, OS 6-2162. A

STUDEBAKER, custom, 1950. RICHARD H. MAY. VE 9-5171. A

MOTORCYCLE. 1951 James 200, $125. HELEN WHITE. OR 2-7074. A

FREEZER. 12.3 cu. ft. chest type. $200. H. B. CAROTHERS, DA 4-3849. A

POCKET WATCHES, 21 jewel Hamilton, $25; 17-jewel Waltham, $10. R. F. YARBER. PL 4-3458. A

TV. 16" Emerson console, $50. E. J. McGOVERN. OS 5-7414. A

ELECTRIC SHAVER, Remington 60 deluxe, used 2 weeks, $15. OS 6-6074. A

SKI BOAT, 18', trailer, $750; Aqua-Glide single SKI, $27. JIM HAIZLIP, OS 6-3319. A

REFRIGERATOR, 6½ cu. ft. Servel, $25. C. R. FLOYD, OR 7-2367. A

VACATION TRAILER, Crown-built. sleeps 4, stove ice-box, butane, $525 or offer. LESLIE MATTHIES, LA 5-1959.

CAMPING EQUIPMENT, 9x12 tent, 3-burner Coleman stove. Coleman lantern, ice box. 3 cots. $50. DA 4-3296.

DODGE. 1949, convertible, '53 V-8 motor, $500. C. G. KREUTZ. PL 7-1122.

VIOLIN, case, $20; 2 bait casting FISHING RODS. $8.50 total. M. GOULKER, OR 7-6941. A

FORD, 1934, 5-window coupe. ¾ flathead, ANDY GALVEZ, LU 8-4647. A

FOR SALE

FORD, 1934 coupe, powered by modified '50 Olds. JIM BEAUCHENE, LO 6-3441. A

TRACTOR, 7½-ton Cletrac, $850; GMC CARRY-ALL, 1952, $850; 16mm. projector, $50; 1954 Fleetwood 35' TRAILER, $2800; GOLF CLUBS, $25. E. J. HARVEY, KE 3-1765. A

CABIN, large lot with extra lot. Crestline, 1½ baths, furnished, $4900, $1200 down, balance $45 month. K. W. RICHTER, Kimberly 5-1014. A

BINOCULARS. Zeiss, 8x24, $85 or offer. WILLIE HOOFT, YUkon 6-7013. A

CAR JACK, floor model, hydraulic; Black & Decker BENCH GRINDER. PL 2-9597.

BEDROOM SET, maple, $150; wrought iron DINING ROOM SET. china cabinet. $75; BABY CRIB and MATTRESS, $10; BATHINETTE, $10. DA 4-4831, after 6 p.m. A

ACCORDION, full size. 120 bass, Hohner, $75. Box 2008. A

REFRIGERATOR, 6 ft. Servel; Magic Chef RANGE, reasonable. C. G. KELLER, PL 5-3494. A

SHOTGUN, 12 gauge, pump, $60; complete DIVING OUTFIT, Northill, never used, $147. OS 5-9551. A

LATHE, 6"; DRILL PRESS; COMPRESSOR; ½ h.p. MOTOR; ¼ h.p. MOTOR; 6" TABLE SAW. $200. NE 2-6441. A

REFRIGERATOR, Crosley Shelvador, $80; chrome DINETTE SET, $30; ABC-O-Matic WASHER. $80. DA 9-7079. A

SHOPMASTER, 6" power table saw, ¾ h.p. motor, tilting arbor, $75. WILMA BRADBURN. OR 7-4540. A

PIANO, small upright, $135; FORD, model A. $75. OX 2-9206. A

SPINNING REELS, 2; POLES, fresh water, $40. OR 1-0852, after 4 p.m. Sat. and Sun. A

RANGE, O'Keefe & Merritt, 7 months old. $150; Sears Kenmaid VACUUM CLEANER, used once, $140; REFRIGERATOR, Admiral dual-temp., $130; DINETTE SET. 6 chairs, $80; 6' aluminum STEP LADDER. $14; combination HEATER-COOLER. $14; FIELD BINOCULARS, $18. J. MARCANTONIO, OS 6-6164, 6-9 p.m. only A

TV, Muntz 24" console, equity free, take over payments $9 mo.; 5-piece chrome DINETTE SET, $35; complete BEDROOM SET, 2-control electric blanket. dresser, offer. C. W. NASH, PL 6-2467. A

TRAILER, Spartan, 27', sleeps 5, fully equipped, half bath, reasonable, consider trading for lot. DOLORES FENN, DA 6-7368. A

KITTENS, Manx, pedigreed stock. ARNOLD STRAUB. OS 6-7723. A

MATTRESS. Beautyrest, BOX SPRING, double, $25; mahogany BUREAU. $15; HEARING-AID, battery-type, $35. OR 1-4814. A

EYE QUIZ

In perception test, page 2, eyes are focused on following, reading from top down:

Altimeter
Accelerometer
Windshield
Air Speed
Machmeter

RANGE, Western Holly, OR 1-4361.

BENDIX Economat, $35; Easy Spindrier WASHER, $20. F. F. DAMMAN. TO 7-0593. A

FORD, 1929 model A sedan, $60. PAT OLSON, FR 9-3634. A

MOTORCYCLE. 1954 Triumph Terrier, $235. DAvenport 6-4226, after 11 a.m.

DOGHOUSE. large, custom-built, removable roof. $10. GERTRUDE ACKERMAN, DA 3-1580. after 5 p.m. A

PARADE DRUM. Slingerland, $20. R. L. FUNKHOUSER, FR 5-4763. A

PUPPIES, German Shepherd. AKC. $75 and up. J. F. KASSEBAUM, FR 9-7154.

TV-RADIO, comb., RCA. 10" screen, $35; BICYCLE, man's 26". $15; TV, 8", wood cabinet, Hallicrafter. D. P. ERHARD, OS 6-5219. A

SWIMMING POOL, 18' Doughboy plastic, 5500 gals., used 3 months, $130. OR 1-0643. A

TIRES, TUBES AND WHEELS, two 6.70x15, two 6.00x16, six hole wheels, $4 each. G. A. FRAWLEY, Box 2012. A

TRAILER, 1-wheel, 4' 4"x4', steel, license, hitches $45. SHIG OKADA, RE 2-9259.

ELECTRIC-BEARDSLEY, 1913, completely restored, $875; BOAT, Chris Craft hull, 25½'. $225. FA 8-5584, after 6 p.m.

BUICK, 1956, Century 4-door hardtop. OS 6-7390. A

WASHING MACHINE, Thor semi-automatic, $35; TABLE LAMP, brass modern. $8. JOHN STUCKLEY. PL 6-7337. A

FURNITURE, chrome dinette set. $57; Western Holly range, $97; 2-piece sectional $105; club chair, $55; occasional chair, $25; 2 blonde end step tables, $14.50 each; blonde combination coffee-canasta table. $27.50; blonde corner table, $18.50; table lamp, floor lamp. 9x12 rug. TE 5-1503. A

BOXER, male, AKC registered, 2½ years old. JOE HUTCHINS, DA 6-5619. A

NEW AID YEAR

Norcrafters' combined charities program—AID and NOR-AID—will end its first fiscal year at Northrop on July 31. A new campaign is coming up. Details to be announced

FOR SALE

CHEVROLET, 1950 deluxe club coupe. LLOYD H. KRAUSE, OS 5-1654. A

PONTIAC, 1941, $35. FERNE C. LOCKWOOD, Box 2010. A

CHRYSLER, 1948 2-door, offer. G. D. THURMOND, FR 4-3579. A

FORD, 1946 sedan, $100. ROBERT STARKEL, DA 3-1387. A

RUG AND PAD, Alexander Smith, grey, 9x12, all-wool, offer. HELEN WHITE, OR 2-7074. A

HOUSE, older 2-bedroom, Hawthorne, fenced, $6800, $1500 down or $6400 with $3000 down. OS 6-6956. A

RUG, hooked, blue, 9'x12', $15. OR 1-1608. A

TYPEWRITER; portable WATER SOFTENER; automatic TOASTER; CARPET SWEEPER; VACUUM CLEANER; CAR COOLER; WAFFLE IRON; ELECTRIC BROILER; VIOLIN; tenor GUITAR; BED FRAMES; garage door SPRINGS; banjo UKELELE. OS 6-6449. A

HOUSE, 2 bedrooms, separate dining room, fireplace, double garage. Morningside Park area, $18,950. CAVEY, PLeasant 2-2175, PLeasant 9-9874. A

MOTORCYCLE, 1948 BSA, 250 cc., offer over $190, accept monthly payments. LAmbert 5-6027. A

SPEED GRAPHIC, 2¾x3¼, Heiland flash-gun; companion ENLARGER; complete DARK-ROOM OUTFIT; RCA cartridge-type WIRE RECORDER; RCA 40-watt POWER AMPLIFIER, accept monthly payments. DA 6-2467, evenings. A

VACUUM, Kenmore, tank type with cart, $30; CARPET SWEEPER, $2; stucco HOUSE PAINT, 7 gal. peach, $10; DOG, Irish Setter, 1 year, $10. FR 9-8108. A

MOTORCYCLE. 1948 Triumph, 500 cc., $195. EX 7-5938. A

HENRY J, 1951, 6, $175. ZACK SAVELAND, TH 8-5416. A

WANTED TO BUY

AUTOMOBILE PARTS, chassis, axles, wheels, 1933-1937 Dodge or Plymouth; TIRES, 6:50x16, 6-ply truck type; PIPE, PIPE FITTINGS, up to 3". OS 6-5253, week days. B

SIGN, real estate, Neon preferred with transformer. E. J. McGOVERN, OS 5-7414. B

RECORD-PLAYER, old, in fair condition. JIM LANG, Box 2006. B

UMBRELLA TENT, 7'x7' or 9'x9', dry fill. CORNELIUS A. GARCIA. OS 6-8321. B

JEEP, 4-wheel drive, 4x4. R. E. MYERS, DA 4-7452. B

FORD PICK-UP, 1940, ½ ton; CEMENT MIXER. WILLIAM ROSSER, FA 1-1341.

FOR SALE OR TRADE

HUDSON, 1948 Commodore "6", 4-door, $175 or trade for record player, TV, 8mm. movie equipment or ? HENRY ZIMA, PL 2-9582 (message). M

BUICK, 1955, 2-door Riviera, $1400 equity for '50-51 Ford, Chevrolet, camping trailer, outboard trailer, or ? DA 3-2746. M

BOAT, 15'. ⅜ plywood. trailer, best offer over $250 or trade for camping trailer. JAMES G. BURKE, OR 1-1992.

SPEED GRAPHIC, 3¼x4¼. Ektar F-4.7 supermatic shutter, flash, want good 35mm. camera or cash. T. A. MORRIS, EX 6-0067. M

JEEP, 1955, 4 wheel drive, ½ top, side doors, trade for comparable hi wing light plane. J. DON MORE, TE 0-4476.

LAND, 2½ acres, Las Vegas, Nev., $1250, $350 down, $25 month, consider trade for land or property. Box 2004.

CHRYSLER, 1949 club coupe, trade for sailboat or $350 cash. FRED WADLE, Box 2009. M

FOR SALE OR TRADE

PONTIAC, 1941 "8" sedanette, trade for electric motor, 1 h.p. or more, power tools, photography equipment, or sell. TH 8-5416. M

CUTTING TORCH, butane, 35 gal. tank, trade for good air compressor w/wheels or $75 cash. G. L. NICKEL, FR 2-0585.

REFRIGERATOR, Kelvinator, $30; small BINOCULARS, $7; screen door, $3. I. PATTERSON, OR 4-4032. M

MOTORCYCLE, 1953 Harley K, '54 motor, sell or trade for equity in 1956 auto. JOHN ANDERSON, Box 2011. M

HOUSE, 2-bedroom, fenced, patio, R-2 lot, vacant, North Redondo Beach, equity $3700 or trade for boat, house trailer, construction equipment. Full price $8950, payments $67 month. FR 4-7296. M

CHEVROLET, 1938, $30 or trade for two-wheel trailer and tarp. G. A. FRAWLEY. Box 2013. A

BUICK, convertible, 1948, $225 or trade for camping equipment or teardrop trailer. C. T. DORSETT, DO 7-5928. M

FOR TRADE

DODGE, 1948 ¾-ton pick-up truck, trade for Jeep in good condition. PAUL KOERSCHGEN. DA 9-1930. C

FREE (To be given away)

KITTENS, mostly Persian, males, 2, 7 weeks old. A. M. STEINMETZ, Box 2014. D

RENTALS OFFERED

APARTMENTS, 1 and 2 bedroom, unfurnished, garage. Inglewood. EX 6-6823 or EX 9-5587. E

HOUSE, 3-bedroom, unfurnished, near Northrop. OS 6-8097, after 5 p.m. E

APARTMENT, furnished. OS 6-8135. E

DUPLEX, 2-bedroom, unfurnished, garage, fenced, water paid, Torrance, $75 month. ARTHUR ECK, DA 9-3739. E

SHARE ROOM, man, near Plant 1. $7 week. A. E. FRY. Box 2005. E

APARTMENT, 1-bedroom duplex, unfurnished, Prairie Ave., opposite Alondra Park, $65 mo. V. F. RILEY. FR 5-2780.

ROOM AND BATH, private, separate from house. $10 week. BERNICE SATTERLEE. OS 6-8512. E

BACHELOR'S QUARTERS, private entrance, private bath. $12.50 per week. C. G. KELLER. PL 5-3494. E

APARTMENT, unfurnished, deluxe. 1 bedroom, garage, Laundromat, North Inglewood. $70. OR 2-3169. E

HOUSE, near El Camino College and Alondra Park, 3-bedroom, dining room, 1½ baths, fireplace, no pets, $125 mo., water paid, available July 1, 1-year lease preferred. FA 8-5584 after 6 p.m.

APARTMENT, furnished. 1-bedroom, garage, Inglewood. OR 2-2555, after 5:30 p.m. E

CHILD CARE OFFERED

CHILD CARE, infants under toddling age. days or nights. MRS. BUSH. OR 7-7500. G

CHILD CARE, girl, age 1½-2 years, or 7-9 years, in my home, Anaheim. VIOLET CARDER, KE 5-7114. G

PERSONALS

WANTED. someone to do my ironing in their home. Will pay $1 per hour. ELOISE BERTUSH, FR 9-7632. L

WASHING AND IRONING in my home, Anaheim, reasonable. VIOLET CARDER, KE 5-7114. L

WITNESS, anyone witnessing damage to tan '54 Pontiac parked in lot O, May 17, please contact. W. W. LUND, Jr., OS 5-6041. L

"Atta ole stealin'—!"

SPORTS

DIVERS TO BAHAMAS

VISIT VIA CAMERA EYE

Skin divers and their friends are scheduled to take a trip to a lonely island in the Bahamas, rich in legends of sunken galleons and pirate loot.

The trip will be via a color movie by Leon Paddock, underwater photographer and marine zoologist, titled "Sails to Andros" —with a companion feature titled "Spear That Fish".

In "Sails to Andros" viewers will see the color and enchantment of the gardens of the sea and the mystery of its primitive life forms, and they will share the humor of life while vacationing on a sailing vessel.

The film visits a quiet town cradled in a cove among cocoanut trees and a people whose only worry is the coming of the hurricane. The picture will take viewers along with the spearfishermen as they hunt the Nassau Grouper and they will explore a shark-infested skeleton of a once-proud British ship, caught and held by the reef.

"Spear That Fish" was photographed by Paddock on an expedition to the Gulf of California. It will give divers a look at the game to be found in the area and some valuable tips on how to land it.

The two-hour color and sound movie program will be held at 8 p.m. on Saturday, June 23, at the NRC Clubhouse. Tickets are on sale from all NRC Skin Diving club members at 50¢ each. Children under 10 years are admitted free with parents.

All Norcrafters and friends are invited to attend. Details may be obtained from Personnel Activities, extension 595.

Cameramen Prove Third Time Charm

Two legs on a perpetual trophy that requires three to keep does not mean the competition is over, avers Scotty Budge, NRC Camera Club commissioner, days.

This was conclusively proved by NRC Camera Club folk on Friday a week ago when the annual Hawthorne-Anaheim photographic competition took place.

The judging, held at Anaheim's NRC Clubhouse, turned up first three places in color, second and third in B&W, plus two honorable mentions for Northrop Field.

This was enough to deprive Anaheim of permanent possession of the trophy which they had won on the two previous occasions of the competition. Three wins in a row are necessary to put the cup on the mantle for keeps.

Norcrafter shuttermen who saved the day are:

Color, first, second and third respectively: John Ray, Harvey Heaverlo, Howard Butler. Black and White, second and third: Jack McAleney and John Ray. Anaheim's Bill Conliff took B&W first place.

Northrop - Hawthorne honorable mentions went to John Ray and Howard Linnenkohl.

When the scores were totaled—the perpetual therefore came to Hawthorne, where it now rests —for 1956-57, at least.

Pool's Full, Water's Fine; Everybody In

It's that time again. The sun is shining, the birds are singing and the ole swimming hole is beckoning.

In this case the ole swimming hole is a near-Olympic size concrete establishment complete with life guard and locker rooms. Namely, the Leuzinger High School swimming pool.

The pool opens for Norcrafters and their families on Wednesday, June 20, and swimming will continue every Wednesday and Friday until August 24.

Dive-in starts at 4:30 p.m.—with the "everybody out" call slated for 6:15 p.m.

Wednesday night will be set aside for adults only. Children are welcome on Fridays if accompanied by an adult Norcrafter. There is ample seating for non-swimming adults.

There is no charge for swimming. Courtesy of the NRC.

RIO HONDO BASE SET BY NRC FOR GREENS TOURNEY

NRC golfers with established handicaps are invited to participate in the June Tourney on Saturday, June 30. The Rio Hondo golf course will be the scene of the battle.

Players are limited to 80 in number. Tee time is 11:30 a.m. to 1:30 p.m.—first come, first served. Green fees total $3.50.

Entry deadline is June 22 or when the player limit is reached. Personnel Activities has blanks and details.

HOME SHOW NEXT ON PA DISCOUNT

The 11th Annual Los Angeles Home Show starts June 14 at the Pan Pacific Auditorium and Norcrafters are invited to attend at discount rates.

Special industrial discount ducats are available in all Personnel Activities offices. These cardboards entitle all Norcrafters to purchase adult entry to the show at a 45¢ saving. Regular price is $1.25; discount price 80¢ including tax.

Tickets are valid for all days, all hours. Show is open from 12:30 to 11:30 p.m. every day.

LURE OF THE GAME—. The fast eye of the camera points more eloquently than words the action and suspense which accounts for the popularity of the Great American Pastime. Details? It is the opening game of the Northrop night shift league—teams 5620 and 5622—. Umpire is Ed Parr, catcher Tom Laney, Dept. 5622. That is Jim Foley heading for first base. From the way the third sacker is moving in on the ball, the odds are Foley's sprint is in vain. Or maybe not. That's the game.

Tick Canyon Lures GM's—Storm Prex

Tired but happy is the old saw that fit like a glove all members of the NRC Gem and Mineral Club following their trek to Tick Canyon, up Soledad way.

Fifteen stout Norcrafters and families made the trip. They added plume agate, chalcedony, and howlite to their collections. met an NRC G&M man from Palmdale who pointed out good rockhounding spots.

This took place on May 19 and 20.

On Wednesday, May 23, more G&M news was made by the re-election of Elmer Storm for his second year of commissionership. Election was held at the NRC Clubhouse. Others who were ballotted to officer spots for the coming year:

Sophia Mathews, secretary-treasurer; Naomi Cole, historian and librarian; Raymond Cole, California Federation director; Don Kucera, alternate director; Bud Halstead, field trip chairman, and Frank Augustus, membership chairman.

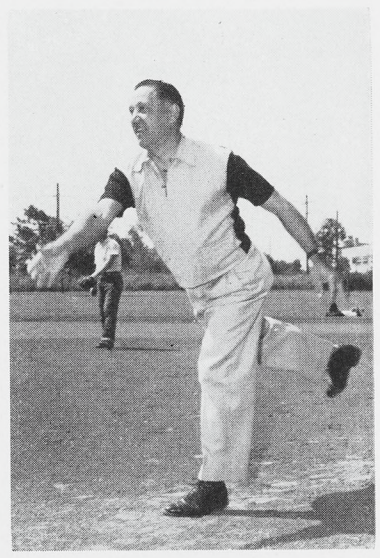
BATTLE BREWING GRUNION INVADE —PEOPLE READY

All Grunion beware! The DFG spy system has discovered that you plan your invasion of the Southern California coast this Saturday from 10:30 to 11:30 p.m. They are waiting for you.

Grunion versus People warfare rules limit combatants to: Grunion—any size; People—any size and all ages, but any over 16 must have valid angling license.

Do not despair—they can only catch you by hand on the beach or in surf. Honor rules state that no appliance of any kind may be used nor may holes be dug in the beach to trap you. It will be a fair fight—fumbling hands vs. slithering fish.

GO, GO, GO—! If the camera angle isn't deceiving it looks like Bill Engle will be waiting with the ball at first a split second before Fred Ferris hits the bag. Ump Loren Hamilton waits to call Ferris out—or safe. The game was between El Segundo and Dept. 5300 opening day of the day shift NRC Softball league. Scores showed: Dept. 5300 team—3. El Segundo—1, and in the second game: Dept. 5620—15, Davidson Brothers—11.



FIRST BALL—. John Breneman, assistant factory manager, nights, displays top form in first toss to start night shift NRC Softball league. Opener was played by teams from departments 5620 and 5622. Score: 5620—8; 5622—5.

FANS—. All over the country last month Americans were alternately freezing and burning as they sat in bleachers and cheered their favorites in the first day of ball season. It was cold when the NRC Softball league—days—trotted onto the field for their opener but the fans were there.

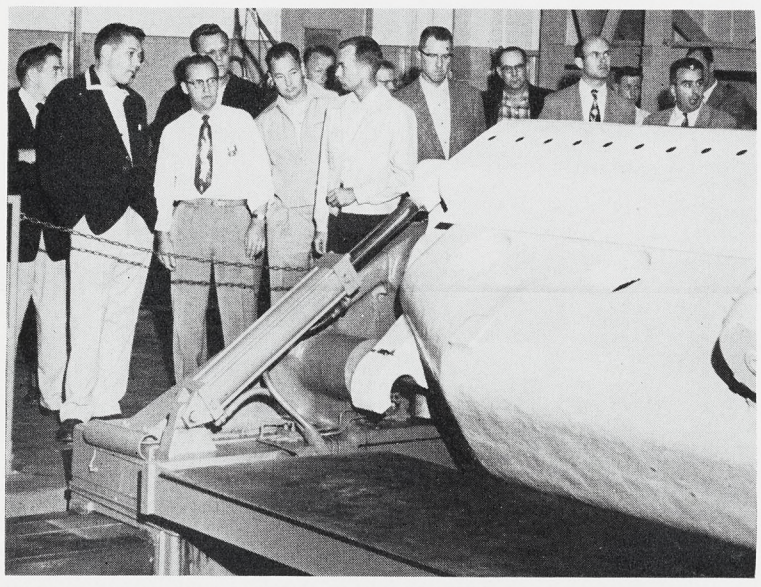
ONE OF BENEFICIARIES of Florida Norcrafters' A-I-D donations was Boy Scout organization in area. Accepting: P. B. Campbell, district commissioner of Scouting, Central Florida Council. At check presentation: F. G. Hertel and F. B. Knight, A-I-D committee; J. W. Oed, of Personnel; Campbell; Jack Cushman, supervisor of Industrial Relations at Northrop facility, MTF; and W. R. Mathews, A-I-D committee member. Cushman is chairman of committee at the Northrop Patrick AFB facility.

Next Stop: Detroit Roundup

IT SAYS RIGHT HERE—. Sandra Jo Starks, NRC Mariner, shows Luann Whitmore, left, and Pat Maupin, right, appointment to National Senior Girl Scout Roundup to be held near Detroit, Michigan. Sandra will board special train on June 29 which will pick up Scouts enroute.

PHOTO FEATURE:

Northrop News Pictorial

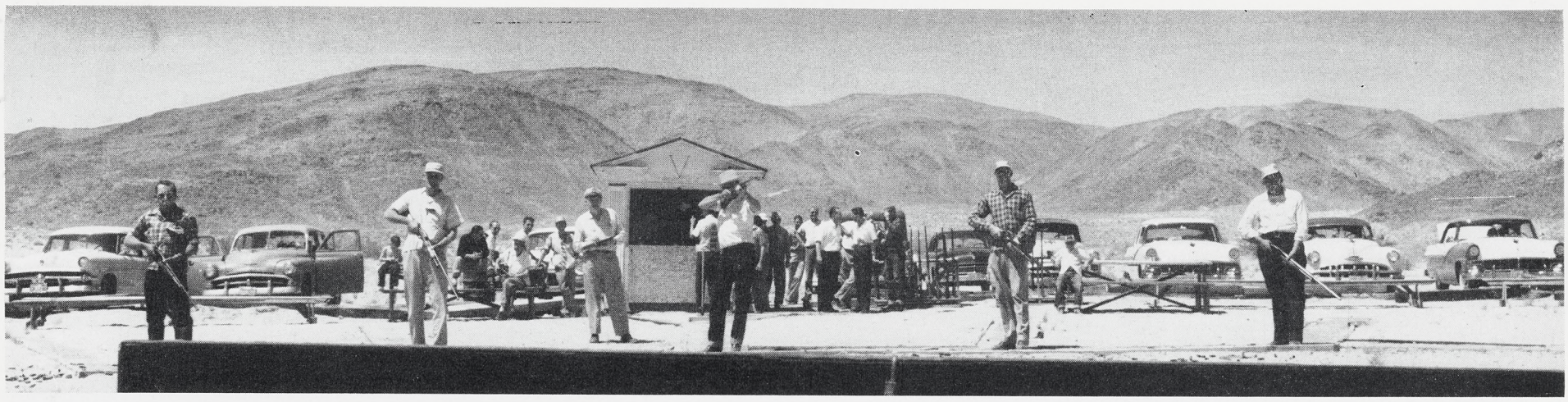


REPS of Orange County industry's supervision toured fabrication departments of Hawthorne under leadership of Clarence Stayner, Anaheim Division night shift Industrial Relations rep. They are shown in Sheet Metal. Visitors are members of human relations adult education class being taught by Stayner.

OUTSTANDING help to Air Force Recruiting Service brought Art Baker, noted TV master of ceremonies, a Revell model Scorpion. Presentation was made by Sergeant Frank Siniscalchi.

WILLINGNESS, ABILITY to do any job of maintenance on F-89s in 43nd Fighter Interceptor Squadron, Minneapolis-St. Paul Airport, won Tech Sergeant James J. Skaja Airman of Month honor in Air Defense Command. Military honor is not first for Skaja—few years ago in Army he was named outstanding soldier of his battalion.

ANXIOUS ALASKA ANGLERS found flight line lake formed by melting snows good place to rehearse their casts. Testing fishing gear are 18th Fighter Interceptor Squadron members Major John H. Rogers, commander, Captain Robert J. Frisch, and Captain Earl Blum, all at Ladd AFB. Long summer thaw will soon take care of "lake".



CLAY PIGEON EYE VIEW—. Trap shooting Palmdale and Edwards Norcrafters had field day during Trona Rama outing at skeet range provided by American Potash and Chemical Corporation for employees. Chemical company hosted Norcrafters at its Trona recreation park with swimming, golf, bowling, archery, tennis, dancing, trap shooting, bridge, and a plant tour. (Other pix, page 2.)

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, June 20, 1956

Outstanding Scholars

PRESIDENT Whitley C. Collins, left, and Vice-president C. Hart Miller, Administration, right, were hosts recently to Gordon McKinzie and John Baker, Claremont Men's College students who were awarded Northrop scholarships at the school. Miller is chairman of Scholarship Award Committee, which includes John B. Clark and Al V. Cline, with Tom Darden coordinating program.

College Lauds Pasadena Lab Chief Taylor

Dr. Philip H. Taylor, chief of Northrop's Pasadena Engineering Optical Laboratory, has been honored by his old school, Santa Ana College, with the Alumni Achievement award, highest bestowed by the college faculty.

A member of Santa Ana's 1924 class, Taylor went on to receive his AB degree in physics at UCLA; master's degree in astronomy from Case School of Applied Science, Cleveland; and his doctor's degree in physics and astronomy from the University of Pennsylvania.

Taylor joined Northrop in 1947. He has served as research engineer on missiles, chief of guidance development, executive assistant, and since 1951 as chief of the Pasadena lab.

The presentation of the Santa Ana award was made at the college's commencement exercises.

The presentation revealed that Taylor was such an enthusiastic astronomy student that he helped two other science majors in constructing a 10-inch reflecting telescope for the college. One of the three students working on this project is Claude Hayward, who received an Alumni Achievement award last year for his work as an atomic physicist for General Electric in Schenectady.

Taylor's extra-curricular activities had also marked his Santa Ana College days. He was captain of the track team, art editor of the yearbook, member of the orchestra, and an honor student.

Arctic F-89s Fly No-Accident Year

The 74th Fighter Interceptor Squadron at Thule, Greenland, last month celebrated the completion of a whole year's flying in its F-89 Scorpions without a single accident.

Neither major nor minor mishap marred the record of the year, the 64th Air Division reported.

During the 12-month period the "Flying Tigers" flew more than 7000 hours of jet time in the Arctic (including mock combat activities in "Operation Arctic Night"—see feature on page 3, this issue).

Of the 7000-hour total, slightly more than 6000 hours were flown in the F-89Ds. Almost a third of the time was piled up during the winter's three-month night and preceding transition from continual sunshine to darkness.

Lieutenant Colonel Fred J. Wolfe, who was in command of the squadron during the bulk of the safe-flight period, took precautions to avoid jinxing the record during the last few months.

He requested the squadron flying safety officer not to change bulletin boards listing days, hours, months "since the last accident".

And as the year drew to a close, air crews and ground crews also maintained a policy of silence respecting the record, for fear that comment would destroy it!

A party commemorated the milestone, and at the same time provided a send-off for Colonel Wolfe, whose assignment changed. Deep blue, thousand-year-old ice cooled the refreshments.

After hearing Colonel Wolfe's commendation of pilots, ROs, and ground crews, the squadron heard from Lieutenant Colonel Walter A. Smith, jr., who was assigned commander ten days before the record was set.

Colonel Smith pointed air and ground crew members toward continuation of the record, and warned of "pitfalls that often befall a unit after establishing such a fine record for safety."

FINANCE PICNIC STEALS STAGE FOR NEXT SUNDAY

It will be denims and dungarees for Finance division folks next Sunday.

The June 24 red-letter day is the date for the annual Finance division picnic.

This year the outing will be held at popular Lake Enchanto. First arrivals are expected at about 9 a.m., and sundown will end the festivities.

Plans for the day, according to Cleve Fowler, picnic chairman, include horseback riding, boating, fishing, games, and refreshments but bring your own food.

Tickets are available from department clerks in the Finance division, or from committee members.

Northrop Is Host To Meet On Missile Guidance Data

Southern California scientists, whose research programs are leading to new military applications of infra-red rays, met at Northrop on Thursday, June 7, to discuss techniques in missile guidance.

The meeting was the 20th Infra-red Information Symposium, held under the auspices of the Office of Naval Research Branch, Pasadena, California, and coordinated by Dr. Arthur Laufer.

Scientists were welcomed to the all-day session by Dr. William F. Ballhaus, Northrop's chief engineer. Speakers included Dr. C. C. Baum, of the Santa Barbara Research Corporation; and Ross F. Miller, N. P. Laverty, L. L. Baskins, L. L. Young, Milton B. Grier and Roland E. Gagon, all of Northrop. Program chairman was Dr. L. Larmore, Lockheed Aircraft Missiles Division.

The Infra-red Symposia are held bi-monthly to further exchange of technical information in this field.

WHEN ROD CLOSE, left, stepped out of Scorpion recently, it marked completion of his 1000th hour of test flying F-89s in his capacity as production test pilot at Palmdale. On landing, Rod was greeted by Rol Owen (who racked up similar milestone not long ago) and other fellow pilots, ROs, crew members.

Marvin Miles, LA Times Repeats Strebig Honors

Marvin Miles, aviation editor of the Los Angeles Times, has been presented with the James J. Strebig Award by the National Aviation Writers Association.

This was the second successive year in which Miles has won the honor, which is a nationally-recognized memorial to James J. Strebig, late Associated Press aviation editor.

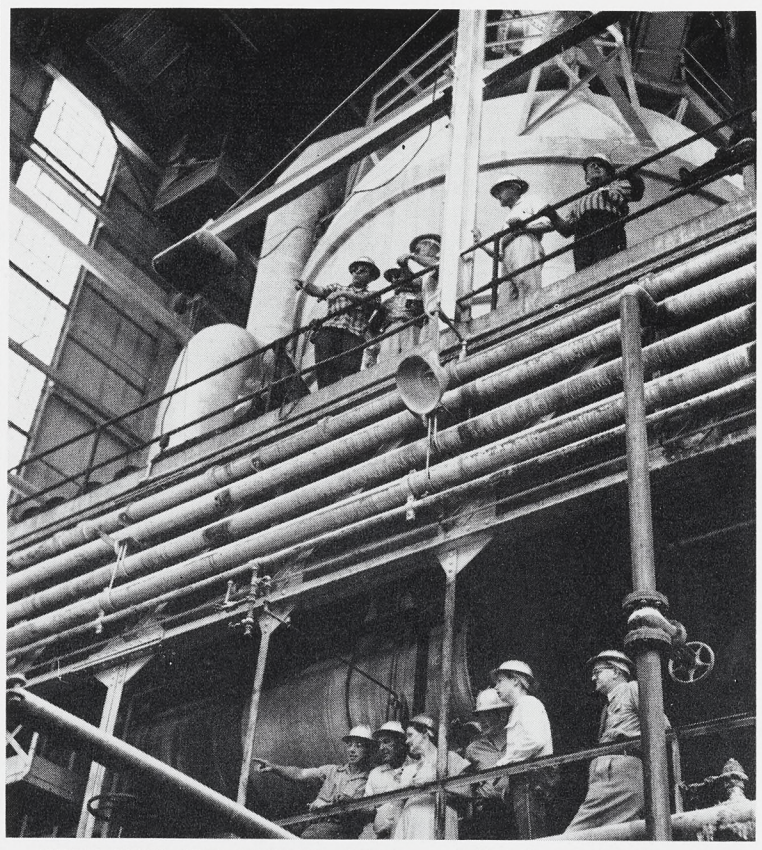
Both series which won Miles the awards were written by the Timesman about Northrop Scorpions—in '54 it was Miles' flight to 53,000 feet in an F-89; and this past year it was the account of Miles' and Photographer Larry Sharkey's trip to the Alaskan Air Defense frontier.

Of particular interest to Northrop personnel was the first of the latter articles—it is reprinted on page 6 of this issue as it appeared in the Los Angeles Times, November 20, 1955.

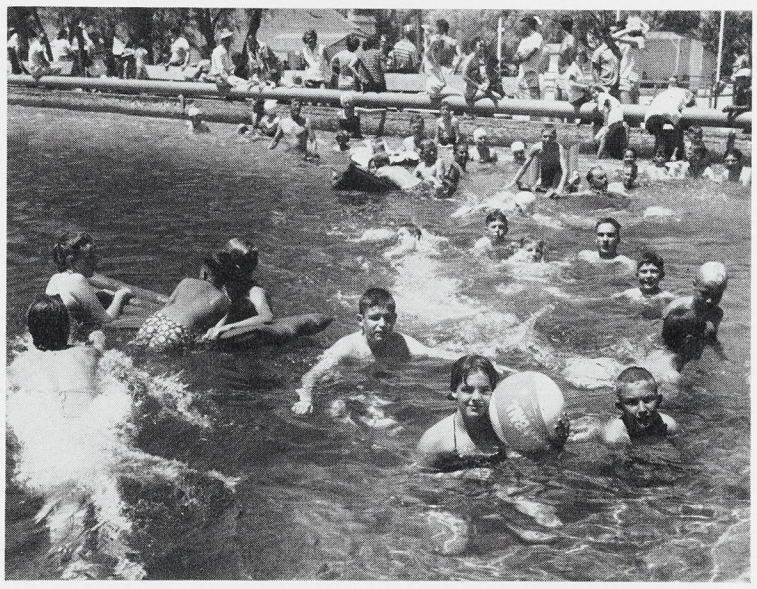
← Celebrating 1000 Hours

STORY OF A HAPPY DAY IN THE DESERT

TOWARD TRONA—. Part of the 500-car caravan which carried 1600 desert Norcrafters and families to the Trona Rama outing is pictured crossing the famous Randsberg Grade used by Wells Fargo Express and 20-mule teams. Host was American Potash and Chemical Corporation.



THEY KEEP 'EM FLYING, TOO—. Officials at the American Potash and Chemical Corporation at Trona explain how lithium processed at the plant is added to lubricants used in all-weather Scorpions to keep chemicals from breaking down in heat or freezing. Visitors toured plant.



DESERT OASIS—. Scene of fabulous Trona Rama day celebration was huge 5-acre APC Corporation park at Trona. The swimming pool, second largest in California, came into record use on the day as witnessed by pic.

WHEN ARE GREENS NOT GREEN—. Golfing innovation at Trona is oiled sand "greens". Here Sam Ponton, PA rep. at Palmdale—second from left—receives tips on proper putting technique from Chemical Corporation personnel. Sand is much faster than ordinary greens.

Magic Carpet Needs Color Fuel To Go

The Magic Carpet is losing altitude.

Travel-minded Plant Three Norcrafters who meet each Tuesday at lunch period to view vacation and travel movies and slides provided by fellow Norcrafters are finding that their Magic Carpet is slowly settling to earth due to lack of fuel.

The fuel in this case is the pictures necessary to keep the carpet moving.

For the past four years this group has met weekly to view and show interesting slides or movies of vacations, travels or hobbies.

There has been standing room only every week (the projection room will seat only about 45).

Guiding hand behind the Carpet in recent years has been Ralph Knowles, Engineering, who makes booking and equipment arrangements.

Recently, Ralph has booked a few commercial films through the Personnel Activities office. However, the primary idea behind the Magic Carpet is the sharing of pictures taken by Norcrafters, and a special invitation is extended to anyone in the Plant Three area willing to show his interesting color pictures. NRC clubs are also included in the invitation.

Package Engineers See Work Featured in Show

Packaging of complex precision equipment produced at Northrop has become increasingly important, a reflection of the growing scope of this type of operation nationally. Air Force figures have revealed that up to seven per cent of the national defense budget is being spent currently on packaging.

Activities of the Northrop Packaging Engineering department (3471) were featured in a recent display held at the Rodger Young Auditorium under the auspices of the Society of Industrial Packaging and Materials Handling Engineers.

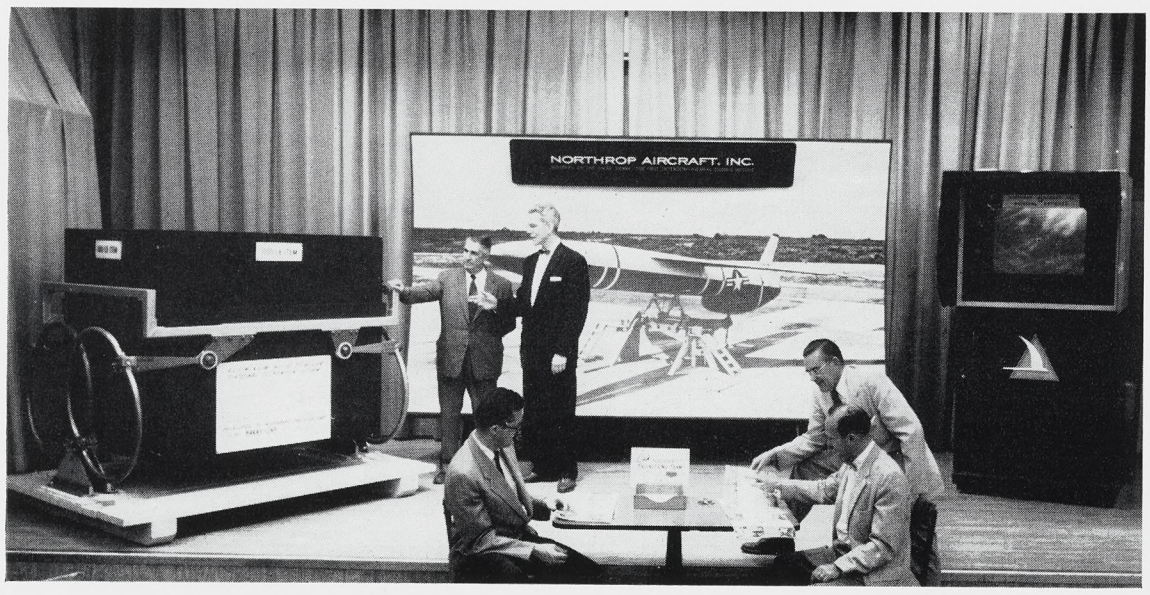
The display highlighted a new development in protection of a guidance system. It demonstrated effectively that the problems of the packaging engineers have increased in complexity with the simultaneous complication of precision equipment.

Fifteen engineers and technicians under Supervisor Harper Welton handle as a direct contract charge the design of packages and the selection of protective techniques and materials for Northrop-produced equipment.

The delicate electronic units, optical prisms, missile components require special handling, Welton points out. They must be protected against shock, vibration, corrosion, dust, and moisture both in movement and in storage.

Storage, especially of ground support equipment, has assumed increasing importance, the packaging engineers say, and competition in design for that purpose is becoming as important as that existing in flight operations, for example.

The operations of Packaging Engineering come under Materials and Process Engineering. The field, those in it say, is ever-widening, but the objective remains the same—maintenance of reliability.



NORTHROP DISPLAY at exhibit of Society of Industrial Packaging and Materials Handling Engineers featured newly-developed torsional hoop suspension system designed to protect 1000-pound guidance unit. In foreground, Otto Kerstner, seated, left, and Roger Watson, standing, right, discuss optical equipment protection with Dr. George Voight, of Pasadena Optical Lab. On stage Harper Welton, right, Packaging Engineering, talks to Colonel A. A. Cook, program chairman of Society.

Northrop News

Vol. 10 Northrop Field Hawthorne, Calif. No. 21

Published every other Wednesday
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

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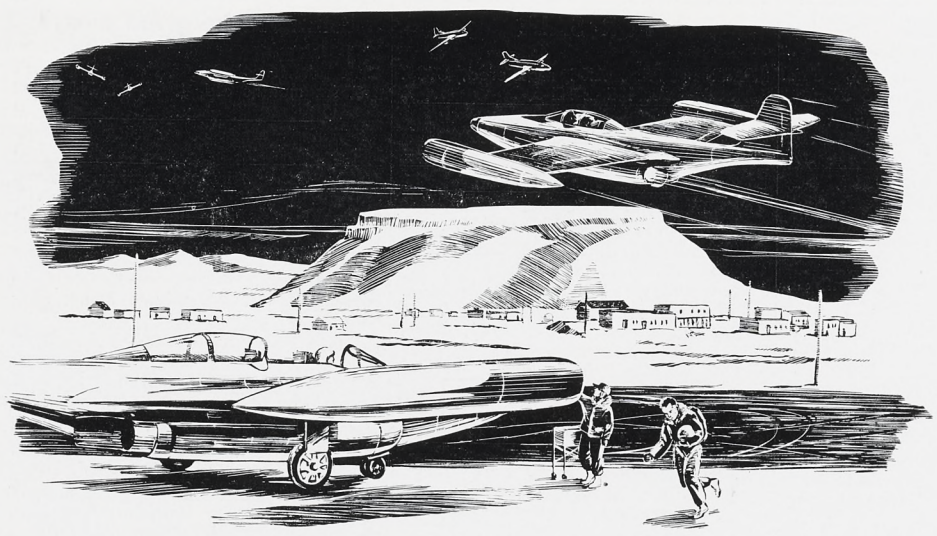
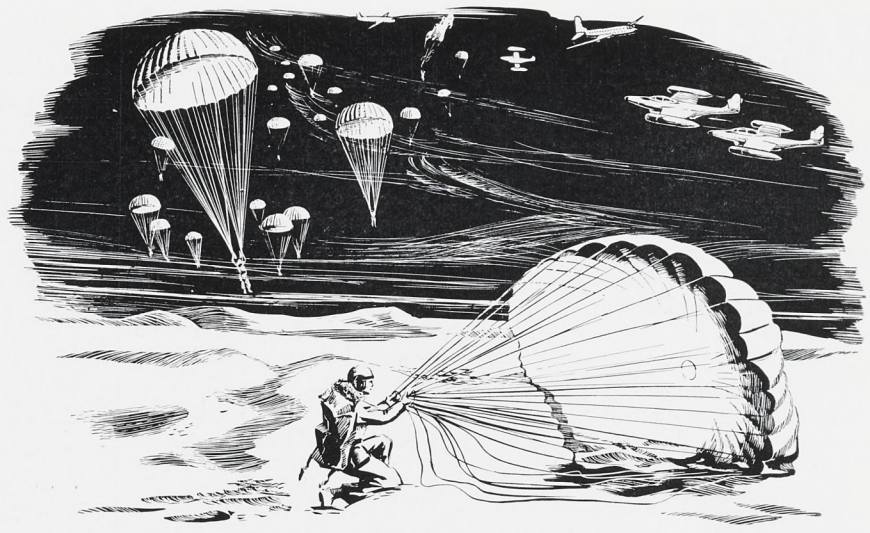


"**SCORPIONS** swarmed off the frozen earth . . ."



"**C-124s** spewed paratroopers . . ."

"Going My Way" forms are available from department clerks at all Northrop facilities, from PA offices, the Personnel department, Industrial Relations offices, lobbies, and Northrop News Office.

Deadline is Wednesday before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 1)
SUNSET & ALVARADO, Alvarado-Hoover all the way to Imperial., J. V. SOTO (5561-22166, Ext. 1280). DU 4-4717. 12-1

(Zone 4)
WHITTIER, along Imperial Highway. Whittier. CHARLES DELISLE (5130-15676, Ext. 2481). OX 7-8258. 12-4

(Zone 13)
SEPULVEDA & VENTURA BLVD., Encino. (Prefer car pool.) SOLOMON I. AGURIAN (1810-43189, Ext. 1312) DI 4-9142. 12-13

SEPULVEDA BLVD. & WASHINGTON BLVD., Culver City. (Will pick up passengers along route; Sepulveda Blvd. or Sawtelle Blvd. to Centinella Ave.; Centinella Ave. to Prairie Ave.; Prairie to Plants I and II.) ROD WILKES (6270-25495, Ext. 496, 1683, 1684). EX 8-2488.

7:30 a.m. — 4:15 p.m.

(Zone 5)
ROSECRANS & ALAMEDA STS., Compton. ANTHONY F. JERZYK (5530-21242, Ext. 1379, 1420) NE 5-5932. 13-5

(Zone 8)
CRENSHAW & 174TH OR PRAIRIE AVE., No. Torrance. (Prefer car pool.) JOYCE RANZENBERGER (3880-12500, Ext. 1230). DA 9-6118. 13-8

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)
SUNSET & ALVARADO, Alvarado-Hoover all the way to Imperial, J. V. SOTO, (5561-22166, Ext. 1280). DU 4-4717. 2-1

(Zone 8)
PACIFIC & 38th St. or Gaffey & 38th St., San Pedro. F. POTTORFF (5509-19971, Ext. 2075). TE 2-5452. 2-8

CRENSHAW & 174TH, Torrance. MARY E. BLOYE (5130-15769, Ext. 2466), DA 4-5483. 2-8

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 10)
PIER AVE. & HERMOSA AVE. Hermosa Beach. EVELYN M. PEARSON (5516-19204, Ext. 540, 533) FR 4-9963. 2-10

(Zone 13)
SEPULVEDA BLVD. & WASHINGTON BLVD. or Sepulveda Blvd. and Sawtelle Blvd., Culver City. (Will ride as passenger or car pool.) ROD WILKES (6270-25495, Ext. 496, 1683, 1684), EX 8-2488

SEPULVEDA & WASHINGTON BLVD., Culver City. HAROLD L. BENNETT (5338-16561, Ext. 2419). 2-13

7:30 a.m. — 4:15 p.m.

(Zone 1)
CRENSHAW & SLAUSON. L.A. 43. PAT BRAMBLE (4220-13596, Ext. 2260) AX 4-3884. 3-1

VAN NESS OR GRAMERCY & SANTA BARBARA. Los Angeles 62. BARBARA GRAY (3145-43837, Ext. 650 or 427), AX 1-8195. 3-1

GLENDALE BLVD.. & SUNSET or Sunset Blvd. & Alvarado, Los Angeles. (Temporary for a couple of months, morning ride most important; will drive part way to meet someone.) JACONE MORSE (3315-12933, Ext. 477, 421), NO 2-3277. 3-1

(Zone 2)
FIGUEROA & W. 28TH, Los Angeles. (Cannot form car pool; will share expense.) DON McCLELLAND (3113-43450, Ext. 402), RI 8-8388. 3-2

(Zone 4)
FIGUEROA & 118TH, Los Angeles 61. DEE RIVELLO (1421-12239, Ext. 691), PL 6-3818. 3-4

(Zone 5)
LONG BEACH BLVD. & CARSON, Long Beach 7. (Car pool considered.) GORDON D. MADISON (3315-12917, Ext. 414, 460) GA 7-1835. 3-5

(Zone 6)
WESTERN AVE. & COMPTON BLVD., Gardena. (Need ride 5 days a week.) CLINT KUHN (5970-25105, Ext. 2161).

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 7)
WESTERN AVE. & 174th, Gardena. ALMA BELL (8610-44302, Ext. 667). 3-7

(Zone 8)
CRENSHAW & 174TH OR PRAIRIE AVE., No. Torrance. (Prefer car pool.) JOYCE RANZENBERGER (3880-12500, Ext. 1230), DA 9-6118. 3-8

(Zone 9)
SEPULVEDA & ANZA, Torrance. ANITA KUEGEMAN (3144-12541, Ext. 1848). FR 5-5317. 3-9

DORIS WAY & SHARYNNE LANE, Torrance. (Seaside Rancho district across 101 Hwy. from Hollywood Riviera.) AMY M. LEFFLER (3420-25280, Ext 1815). FR 5-7004. 3-9

CALLE MAYOR & HWY. 101, Torrance. FRED EISERLING (8620-54, Ext. 1715). FR 5-2047. 3-9

(Zone 9)
CATALINA AVE. AT TOPAZ, Redondo Beach. EVELYN I. ANDERSON (8322-42948, Ext. 1602, 1603). 3-9

(Zone 11)
ANZA & 118th ST., Hawthorne. RUTH NORTH (4210-14184, Ext. 2639) OS 6-1362. 3-11

(Zone 13)
MOTOR & WASHINGTON BLVDS., Culver City. IDA LOVAS (8320-44379), Ext. 1833), VE 8-0305. 3-13

3:45 p.m. — 12:15 a.m.

(Zone 13)
CENTINELA & SEPULVEDA BLVDS. or Sepulveda & Sawtelle, Culver City. Want ride to work only. GINGER ARKILL (5538-21580, Ext. 525 or 2185). EX. 8-4007. 6-13

4:45 p.m. — 1:15 a.m.

(Zone 13)
HAWTHORNE BLVD. & LENNOX BLVD. or Prairie Ave. & Lennox Blvd., Inglewood. IRENE BARB (3141-44329, Ext. 403), OR 1-8991. 8-13

(Zone 14)
LA BREA & HOLLYWOOD BLVD., Hollywood 46. VERN CRAWFORD (9350-28024, Ext. 1810) OLdfield 4-2404. 8-14

CAHUENGA & MELROSE, Los Angeles. (Starting June 25, for two weeks.) OLLIE SIEGEL (5130-15749, Ext. 1334). 8--14

74th Shows Versatility of Scorpion in Thule Mock War

It was war without hostility or animosity, and there was no formal declaration of war, when the 74th Fighter Interceptor Squadron participated in "Operation Arctic Night" earlier this Spring.

And combat conditions were simulated. The freezing polar combat weather was not. It was bitter cold on the Greenland ice cap.

The Scorpions and the men of the 74th who fly them were playing an unusual role — that of ground support aircraft.

On the day the "battle" began, 12 Scorpions swarmed off the frozen earth. It was 31 degrees below zero. Ground crews got the dozen aircraft off at dawn within five minutes. No aborts.

Eight of the '89s climbed swiftly to 20,000 feet to wait for the strike hour of 0700. Four arrowed out to meet C-124 Globemasters which were heading for the objective, their cavernous insides filled with paratroopers of the 82nd Airborne Division.

Strike hour came. The eight Scorpions hovering at Angels 20 plunged down on the imaginary enemy, destroying simulated runways, aircraft, and anti-aircraft emplacements, clearing the way for the paratroopers.

Strike hour plus 30 minutes. The C-124s spewed their cargoes of armed troops. The four escorting Scorpions strafed the target area.

Ground controllers called for more strikes against bypassed guns. F-89s responded. We took the base, and it became "home". Scorpions landed for refueling.

Again ground crews raced out into the cold, while air crews were being briefed on their newest assignments by their C.O., Lieutenant Colonel Fred J. Wolfe. Within 40 minutes, 12 Scorpions swept down the runway and up.

Ten minutes from takeoff the first element shot over the para-

BY TECH REP DON HOWEN as told to AIREPORTER

troopers to blast the mythical enemy with rocket fire—24 destructive rounds each. The shattering attack accomplished the mission. Back to the base.

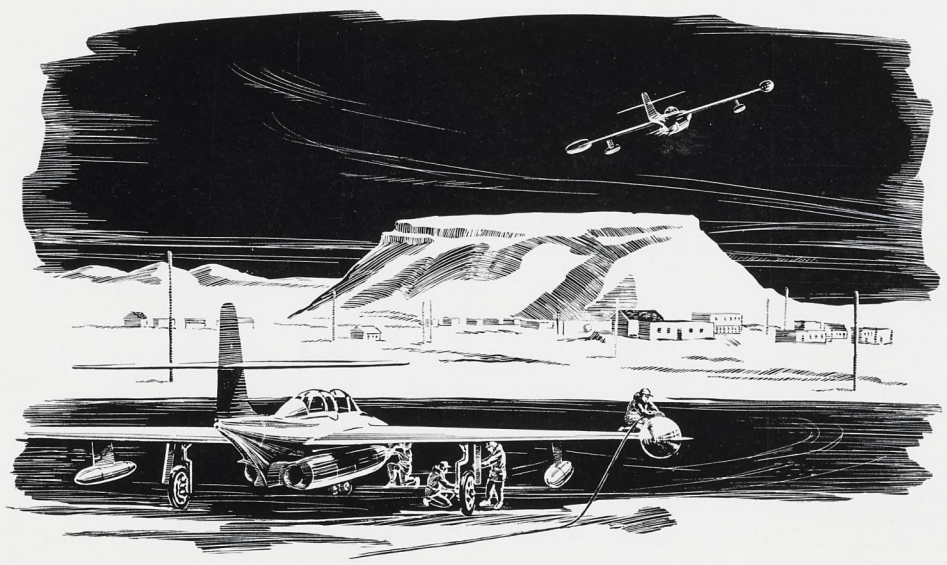
Reservicing took only 30 minutes. Aircraft stood poised for the next call. Word came: some gun emplacements were holding up the advance. Four Scorpions answered the summons, and within minutes the job was done.

This is the way it was on "Operation Arctic Night" at Thule. And all the time the 74th continued to carry on its normal all-weather alert commitment.

Performance of his men in the numbing cold drew high praise from Colonel Wolfe.

"Air crews and ground crews worked together to an extent I never before thought possible," he said. "I have never been any more proud to fly at the lead of a squadron in my life . . ."

These men are ready for any eventuality.



"**RESERVICING** back at the base took only 30 minutes . . ."

"**GUN EMPLACEMENTS** were holding up the advance . . ."

BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

Use regular Barter, Buy, Sell or Free Form 19-308 (10-53) available from stationery stockrooms, department clerks, Northrop News office, Personnel Activities, plant lobbies.

Ads will be run one time only. If you wish the ad repeated, please fill out another form and forward to the Northrop News Office, Department 1320, Zone 65.

Box numbers will be provided to Norcrafters who do not have home phones or who do not wish calls. Replies to box numbers are to be in writing. Box number replies will be forwarded by the News Office without delay.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday one week before publication.

FOR SALE

DINING ROOM SET, carved walnut, 9 pieces; misc. FURNITURE. AX 4-0595 A

BICYCLE 20" girl's $15; wooden frame SCREENS, 36"x54," $1.50; 24"x36," $1. PL 5-7521 after 4 p.m. A

BICYCLE, Monarch junior size boy's, speedometer, $39.50 GERTRUDE BLANDI, Box 2110. A

FORD, 1949 convertible, owner called into Armed Forces, $350. HAL B. LAUDEMAN, FA 8-4044 after 5 p.m. A

TENT, large umbrella, $25. SHIRLEY ROYCE, EA 2-4569.

PLYMOUTH, 1939 4-door, '41 Cad. motor, $125. W. H. LA CLARE, OS 5-1818, after 4 p.m. A

HOUSEHOLD ITEMS; bedroom set; children's bunk beds; living room furniture; Kenmore sewing machine; 18.5 cu. ft. freezer; Hotpoint electric range; Norge automatic washer; 8 cu. ft. Frigidaire; Shopsmith, wheelbarrow, small garden equipment, 5' step ladder; O gauge electric train. C. K. BRINKE, FR 2-1533.

RIFLE, .22 Savage, bolt action, scope, spare clip, shells, $20. ROY SCHNEIDER, PL 8-8812 between 4:30-5 p.m. A

CHRYSLER, 1946 (Windsor) convertible, $100. E. NICHTER, OR 2-7164. A

CADILLAC, 1956 El Dorado hardtop, $6000. BILL PHILLIPS, DA 6-1935. A

CONTINENTAL, 1947 Mark I coupe, reconditioned, customized. ROY P. BODEEN, DU 2-4229. A

FISHING BOAT 30' Monterey type double ender, sleeps 2, Plymouth conversion power, $995. DAVID GLABE, FR 5-0723. A

CAMPING EQUIPMENT, 29" stove; Coleman lantern; 4 army cots, 3 camp stools; heavy duty luggage carrier, canvas, all for $50. CHARLES BRADEN, OR 7-5062. A

GRAND PIANO 88 note keyboard, $300; 2 pc. LIVING ROOM SET, $70; enamel top DROP LEAF TABLE, $10; APARTMENT STOVE, $35; Kenmore AUTOMATIC WASHER, $50. LILLY T. BEST. PL 5-4459. A

CHEVROLET, 1937 Chev., $85. W. HALL EVANS, AX 4-7304. A

SADDLES, 2. One parade type, one western roping type; PUPS Toy Fox Terrier. Reasonable. DA 9-3936, evenings. A

HOUSE, 3 bedroom, Hermosa Beach, detached garage, fenced. $10,000 full price, $2,000 down. OS 5-9303. A

GUN, Colt Woodsman, sport model .22 cal. automatic, extra magazine. $35. PL 7-1184. A

JEEP STATION WAGON, 1948 Willys, $350. OR 7-2458. A

REFRIGERATOR, apartment size Frigidaire, 7 cu. ft., $75. ARLINE ELLIS, DA 4-6844. A

CHEVROLET, 1956 Bel-Air, 2-dr. $125 equity, take over payments, bal. on car $2939. DAVE MILLER, GA 9-0209. A

STOVE, apt. size O'Keefe & Merritt, $35; Refrigerator G. E., $115; 9'x12' RUG, small loop, cocoa brown, mat., $25. ANN STEGALL, FR 4-7509. A

CAMERA, Argus C3, coated lens, flash, exposure meter, case. LEWIS E. MERRITT, NE 5-1474. A

GAS RANGE, Grand, Charcolator broiler, $75. J. K. AUBRY, Box 2108. A

FORD, 1955 Fairlane 2-door, take over payments. Balance, including interest $2023.32, pmt. of $77.82 per mo. ROBT. R. REDDICK, WI 7-6791, Palmdale. A

RANGE, Estate, $40; HEATER, gas-steam comb., $25; GUITAR, $5; TYPEWRITER, $8; SCREEN DOOR, 6'-6"x2'-7," $2. W. W. KELLY, PL 4-9637. A

GAS RANGE, Western Holly, $75. V. M. DERUS, PL 2-0888 after 5 p.m. A

BAMBOO REED in rolls 6' wide, three rolls for $16. TO 7-8270. A

SHOE SKATES, women's Chicago, size 8, used 3 months, $30. ROBERT MCGUIRE, OS 5-6096. A

DE SOTO, 1952 4-door V-8, $850. H. PARRY, OR 1-0774 A

OLDSMOBILE, 1953 Super 88, 4-door. FR 4-9834. A

LAND, 40 level acres, Henkley near Barstow, $5000, $2000 down, bal. $35 mo. LAVERN SHELLEY, Box 2107. A

HOUSE, Gardena, G. I. resale, 2-bedroom, wide lot, $10,500. OS 6-5425 evenings or Box 2106. A

SKILSAW, model "E" ¾ H.P., $20; Stewart-Warner TAC (5000 R.P.M.). $15. W. M. MURMA, FR 2-0026. 10 a.m. to 3 p.m. A

FOR SALE

SHOWER CURTAIN SET, green, $1; bunk BED FRAMES, $7.50; SERVICYCLE; 9'x12' & 6'x9' green SHAG RUGS, pads; 4'x6' rose SHAG RUG; three copper planter LAMPS; blue BATH MAT SET. $1. FR 5-9320 after 5 p.m. A

AUTOMATIC WASHER, Bendix bolt down type, $20. F. N. HOLLADAY, OS 6-8156, message. A

ROADSTER, Model A 1931, 16" wire wheels, $75. BOB WINTERS, FR 2-7291, after 5 p.m.

CHEVROLET PARTS, 1941 2-door sedan. JOHN TESSENEER. Box 2105. A

PHONE, I.K.W. all-band, C.W. Rack mounted amateur XMTR, BC 348Q Receiver, assorted parts. Sell all or part. OS 6-5531. A

CHEVROLET, 1955 Bel Air sport coupe. WILBERT T. FERRIS, PL 5-4114.

HOUSE, 6 rooms, 1½ baths, drapes, near Western & Century, $17,500. PL 8-6793. A

PLYMOUTH, 1950 Suburban, $495 cash. DA 9-3436. A

NASH, 1952 Statesman, $500; DINING SET, $40; electric automatic RANGE, $45; BABY CRIB, $10; BREAKFAST BAR, $25; 3 BICYCLES; Studebaker WINDSHIELD; Ironrite IRONER. FR 4-3253. A

REFRIGERATOR, Norge 8.7 cu. ft., cross top freezer, $60. CATHERINE PRUITT, OS 5-2491. A

CHEVROLET, 1954, 210 model, 4-door, $1195. ED WEBER, HO 7-7865. A

BOAT 16,' V-8 Merc engine, trailer, $725; HOUSE, 2 bedrooms & den, fenced, Rivera. ME 0-2595. A

TRAIN, American Flyer 3/16" scale never used, Model Sante Fe diesel. $75. JAMES PAUL LONG, AX 3-3424. A

CAMERA, Leica, Model I, Hector F:2.5 lens, case, $40; Foth Miniature enlarger, $15, FRED JACOBSON, TO 2-5983. A

WASHING MACHINE, wringer type, offer. ROY GUSTAFSON. TO 4-0740. A

TV, 21" Console, 1 year old, $125. DA 6-2124. A

TRAILER, 2-wheel, hitch, jack, large tarpaulin, $48.50; Apex wringer type WASHING MACHINE, pump $50. Box 2104. A

MODEL A 1929 Convertible, $75. OR 2-5470. A

PONTIAC, 1950, V-8 Convertible, Hydramatic, $400. ED WEBER, GR 3-9091. A

TABLE, 4 CHAIRS, $12; DRESSER, $13; HOT WATER TANK, $5; LAND, 100 acres, desert, big well, 16 miles East of Lucerne Valley. B. E. GENTRY, OS 6-2113. A

HILLMAN CONVERTIBLE, new top, $395. R. L. GLADSON, HE 7-7836. A

UTILITY TRAILER, heavy duty, 7'4" x 4,' Clamp-on hitch, offer. C. A. HARRISON, PL 4-7816 or PL 6-6738. A

PUPS, German Shepherd-Boxer, 5 weeks old. $2. WANDA E. WALTON TE 4-7058.

STUDEBAKER, 1940 4-door, $85. ROBERT RAUH, Box 2102. A

OUTBOARD MOTOR, Mercury Mark 15, used 25 hrs., separate gas tank. PL 2-3746 days. A

BREAKFAST NOOK, grey upholstered, formica table; COFFEE TABLE, blonde modern. NE 1-3681. A

OLDSMOBILE, 1947 98 sedan, offer. R. A. MASULLO, CL 6-0963. A

SPINNING OUTFIT, deep sea, Fisher 5500 rod, RuMer reel, $35. JEROME G. HARKEY, LU 2-2497. A

BENCH SAW, 8," ¾ hp. motor, mounted; heavy duty WHEELBARROW; lady's white figure ICE SKATES, size 6, offer. W. S. DUNCAN, Box 2101 A

CHILD'S SWING, 2 seats, $5; LAWN MOWER, $5. TO 7-8270. A

FURNITURE, modern, living room, maple bedroom, chrome dinette, offer; 1950 CADILLAC convertible, $1300. EX 8-1424. A

FRIGIDAIRE, 11 cu. ft., freezer in top; 2 mahogany END TABLES; SOFA BED and matching chair. DA 9-6765. A

SPEED GRAPHIC CAMERA, 2¼x3¼, Kalart coupled range-finder, accessories, $125; CONTACT PRINTER, dark-room equipment, $40, both $200. DA 6-2467, evenings. A

TV, 16" Admiral, console; 2-piece LIVING ROOM SET, offer. CLYDE STEVENS, FA 8-5078. A

GAS RANGE, Roper, $22; Apt. size WASHING MACHINE, $25; Craftsman HAND-MOWER, $12.50; BATHINETTE, $5; small GAS HEATER, $2. OS 5-1457.

FOR SALE

SEWING MACHINE, portable, 1½ years old, $60. ANNE McCREARY, OS 5-9293.

REFRIGERATOR, Coldspot, $40; white enamel STOVE, $30; Bendix AUTO. WASHER, $30. Box 2112. A

STEERING WHEEL, Buick "55", $2; auto BUMPER JACK, $1.50; metal FIREWOOD BASKET, $2; steamer size WARDROBE TRUNK, $3; antique DISHES. BERNARD BARTON, GR 7-1539. A

AIRPLANE, 1946 Luscombe 8A, Cont. 65, $1150. D. KINDA, DA 9-2295. A

RIFLE, 1955 Savage repeater, used once, $30; Wedgewood STOVE, $35. JAMES N. LEAMON, Box 2111. A

REFRIGERATOR, 9 cu. ft. Kelvinator, $75. OS 5-3694, evenings or weekends. A

PIANO, small upright, $135; FORD, Model A. B. E. BRADFORD, OR 2-9206.

NASH, Ambassador, 1950, 2 door, $275. R. S. HAMILTON, DA 9-6985. A

BASS REFLEX ENCLOSURE, 16x25x37 for 12" speaker, $10. KEN KLIER, FR 9-0706. A

TYPEWRITER, Remington, $20. B. M. ODDY, OS 5-6473, after 5 p.m. A

CHEVROLET, 1951 club coupe 2-door, $300. L. J. OSTROM, FR 6-2185. A

BEDROOM FURNITURE, dresser, mirror, chest-on-chest, night stand, bed, $225. OS 5-5442. A

FURNITURE, bedstead, 2 mattresses and springs, highboy, 3 mirrors, bathroom heater; PATIO FURNITURE, lawn lounge, 2 chairs, rustic. DA 3-3282. A

TRAILER, one wheel, Sears, with tail light, $45. E. C. MILES, Box 2118. A

CHRYSLER, 1948 Windsor, new tires, $350. FR 5-4910. A

RUG, imported Oriental, 11'x15', $75; TWIN BEDS, $25 each. G. R. DuKET. FR 5-8920, after 6 p.m. A

REFRIGERATOR, Crosley Shelvador, Paragon auto. defrost, $50. D. P. ARMSTRONG, OR 7-4054. A

PONTIAC, 1949 2-door, engine overhaul last week, $275 cash or $30 monthly payments. PL 8-8812. A

OUTBOARD MOTORS, 10 and 25 h.p. Evinrude, pressure gas can, $325 takes all. OR 4-4447, after 5 p.m. A

HOUSES, two 2-bedroom stucco on one lot 40'x306', income $85 per month or $165 for both houses. PL 5-5118. A

OUTBOARD MOTOR, 1955 7½ h.p. Elgin, gear shift, $115; ENCYCLOPEDIAS, 12 volumes, offer; ELECTRIC SHAVER, Schick, 1955, $8. PL 4-8117.

HOT WATER HEATER, 20 gallon, $15; double cement LAUNDRY TUB; TYPEWRITER; BABY SCALES, $3; CARPET-SWEEPER; TOASTER; WAFFLE IRON; BED FRAME, $1; garage door SPRINGS, $5; Duart PERMANENT WAVE MACHINE, $25. OS 6-6449. A

WRINGER, WASHER, Universal, $20. J. L. THURMOND, AX 1-0483. message after 5 p.m. A

NEON SIGN, modern, 7½'x2½', $35. E. L. MURPHY, PL 5-0641. A

PUPPIES, German shepherd, AKC, show prospects, reasonable. J. F. KASSENBAUM, FR 9-7154. A

GAS RANGE, Gaffers and Sattler, 5 months old, $150. J. A. FLANAGAN, PL 4-3706. A

CHEVROLET, 1949 4-door, $295. E. DOROW, OS 6-9513. A

HOUSE, 2 bedrooms, double garage, fenced, newly decorated 2 miles from Northrop, $10,750. OS 6-5071. A

BICYCLE, boy's 24" lightweight Schwinn. PL 2-9597. A

CAMERA, Argus 3-C, case; PROJECTOR, Kodak, 35mm., case; all for $75. DA 9-6419. A

FREEZER, 16 cu. ft. upright, 3 compartments, $190; MERCURY, 1956 coupe, $2400. R. LoVECE, Box 2117. A

WINDOWS AND FRAMES, (3), 3'x6' high, $30. IRIS THOMPSON, DA 6-6105.

CAR COOLER, window type, used once, offer over $5. Box 2116. A

REFRIGERATOR, Coldspot, $25; 9'x12' RUG, Axminster, $15; MARINE TOILET, $45. C. FENSKE, PL 8-4994. A

FORD, 1946 2-door, $100. ROBERT N. STARKEL, DA 3-1387. A

BOAT, 12', plywood, with trailer, never used, $165. S. L. PETERSON, Box 2114.

OLDSMOBILE, 1954, "98" 4-door, $1795. R. T. LOMBARDO, OS 5-6936. A

CHEVROLET, 1953 Bel Air 2-door, $950 or offer. BOB COLEMAN, AX 2-7823.

CAMPING TRAILER; BAND-SAW, 18" throat; JIG-SAW, 24" throat; 5½" JOINTER-PLANER; Skil electric HAND SANDER, SHAPER. TO 9-8937. A

CHEVROLET, 1948 4-door, $145. W. MONSMA, PL 5-8747. A

MOTORCYCLE, 1948 BSA-250 cc., best offer over $190, will accept monthly payments. LAmbert 5-6027. A

HOUSE, 3-bedroom stucco, 3 years old, near Torrance, fenced, $8950. $50 down and $25 per week, or will GI with nothing down. TE 4-7305. A

PERSIAN LAMB COAT, black dyed, size 16-20; 8x18 GREENHOUSE. JOHN H. GRAHAM, RE 1-2964. A

YARD SWINGS, children's, heavy duty, $35; 2-piece LIVING ROOM SET, $40; 8-piece DINING ROOM SET, walnut, $70; 1946 ½-ton DODGE TRUCK, $300. R. C. COLLINS, DA 4-7529. A

BUNK BED, twin set, chest of drawers; BABEE TENDA. E. M. SKINNER, DA 6-0378. A

FOR SALE

BOXER PUPPIES, AKC registered, $125. F. R. JONES, NE 2-9876. A

TV, 17" Majestic table model, indoor antenna, $45. WALDO P. CLOTT, DA 9-6923. A

PONTIAC, 1951, 8. NO 2-7021. A

CAMERA, auto. Rolleiflex, F/3.5 Zeiss Tessar lens, $75. JOHN MIYATA, AN 3-8534. A

CHEVROLET, 1950 2-door Styline deluxe, best offer over $300. BILL WILLIAMS, OR 2-9891. A

PACKARD, 4-door sedan, 1948, motor tune-up 2 weeks ago, $295 or offer. W. W. WADDELL, WE 9-4968. A

SEWING MACHINE, Singer, portable, all attachments, $95. HAROLD H. PARRY, OR 1-0774. A

SAILBOAT, Chelan 26', no motor, gaff rigged, complete cruising sails, double ended skiff, glass bottom, $3000 cash—urgent. VERA RIDEOUT, Box 2119. A

TIRES, 6.70x15, blackwall; 2 recap winter-tread 6.50x15, $25 total. W. J. ENGEL, FR 2-7568. A

WANTED TO BUY

CHEMISTRY LAB equipment, balance scales etc. Price must be right. PL 4-4384. B

CHAISE LOUNGES, 2 aluminum. Good condition. MIKE, TO 9-8937. B

AIRCRAFT ENGINE, 50 to 70 h.p. McCullough, or equivalent 2-cycle. D. F. DROLET, NE 5-6197. B

BUTANE TANK, small trailer type. Reasonable. G. J. GRUMMER, GA 7-4370. B

OUTBOARD MOTOR, 10 to 15 h.p. BILL PHILLIPS, DA 6-1935. B

HOUSE TRAILER, 1947-50 27' to 30.' Cash for bargain. Describe in writing to H. E. METCALF, Box 2109. B

EXERCISE RECORDS, set, reasonable. OS 6-2441. B

HOUSE, 2 or 3 bedroom, furnished or unfurnished, garage, prefer fenced yard, reasonable. BESS PHILLIPS, EA 2-2567.

PORTABLE DISHWASHER; CLOTHES DRYER; 12'x15' RUG or CARPET; BEDROOM SUITE; pop-up TOASTER; FOOD BLENDER; HI-FI GEAR. OS 6-3022. B

HOUSE, GI resale or equity, 3-bedroom, 1½ or 2 bath, fireplace, double garage, reasonable distance of Main Plant. GILBERT M. VICK, PL 4-3698. B

FOR TRADE

DOGHOUSE, 3'x5'x3.' Trade for boy's 26" bicycle. E. B. HALLMARK, OS 6-1748

DESOTO, 1953 club coupe, trade for equity in house or income property. OS 6-5425 evenings. C

JUNIOR SIZE BED and mattress, walnut. J. R. HAUPENTHAL, JR., HO 5-1380. C

FOR SALE OR TRADE

FORD, 1951 V-8, 2-door. Want sports car. RICHARD KING, GR 7-1937. M

TRAILER, 2 wheel, 4'x7' box, canvas top, $59 or trade for bigger trailer. MELVIN LILLIG, OS 5-5663. M

GOLF CLUBS, 3 woods, Sam Snead Signature, $35 or trade for what have you. EARL J. HARVEY, KE 3-1765. M

MOTORCYCLE, 1949 Panther, 37.5 cu. in. Trade for Harley Davidson or sell for $200. E. J. KIMLING, FR 4-6429. M

CAMERO & EQUIPT., Rolleicord, B & J 4x5 press w/flash, Solar enlarger, complete dark rm. equipt. for movie or 35 MM camera, boat or cash. STRATTON, OS 5-3662. M

HOUSE TRAILER, 18', butane, sleeps four, $130 or trade on speedboat. M. W. ANGELL, Box 2115. M

UTILITY TRAILER, 2-wheel, 7'x8'x4', want good outboard motor, 2 to 5 h.p., or $40. TED BECKER, Box 2113. M

FREE (To be given away)

SMALL WHITE DOG, good small child's pet, six months old. J. W. STATLEY, OR 7-5545. D

KITTENS, 3 female. LAURA A. WILLIAMS, FA 8-4938. D

DOGS, CATS; Airedale mother, 3 years old and 8 week old puppies; 13 cats & kittens. FR 2-9051. D

RENTALS OFFERED

FURNISHED ROOM, private home, near Northrop. DA 4-4410. E

HOUSES, For lease, 4-bedroom, with den, Manhattan Beach; 2-bedroom on M-2 lot. N. VOREIS. FR 4-3253. E

ROOM furnished, private entrance, $8 week. H. G. HAPPOLDT, OR 7-3620. E

HOUSE, $85 month, 2 bedroom & den, fenced, children OK, unfurnished, lease, near Northrop, FR 4-2505. E

APARTMENT, lower bachelor, furnished, garage, patio, knotty pine living room, Manhattan Beach. FR 5-4118.

ROOM AND BOARD, gentleman, private home, near Plant I. PL 2-7900. E

HOUSE, 2-bedroom furnished, $95 mo., near Northrop. OS 6-1607 or OS 6-6577 after 4 p.m. E

APARTMENT, new 2-bedroom unfurnished, Century & Crenshaw, children OK. $95. EX 6-6823 or EX 9-5587. E

HOUSE, 1-bedroom, unfurnished, Inglewood, available July 1, $70 month, apply evenings. OR 4-4032. E

APARTMENT, 1-bedroom, garbage disposal, garage, near Plants I and II. $70. R. W. FEENY, EA 2-0646. E

HOUSE, 2-bedroom, furnished, fireplace, private beach dock and rowboat, sleeps 6-8; APARTMENT, single, furnished, dock privileges, 2-4 persons. Both Lake Arrowhead. BR 2-4847 or Lake Arrowhead 8934. E

APARTMENT, unfurnished, deluxe, 1-bedroom, garage, Laundromat, North Inglewood, $70. OR 2-3169. E

RENTALS WANTED

HOUSE, widow, boy 13, girl 11, 2 dogs, want big, old house, Manhattan Beach area, unfurnished, not over $65. Fenced. T. M. CHAMBERS, FR 9-7685. F

HOUSE, 2 or 3 bedroom, unfurnished, in Southwest area, 3 adults. ELIZABETH BULLOCK, PL 4-2235. F

HOUSE, 2 or 3 bedroom, furnished or unfurnished, garage, prefer fenced, reasonable. BESS PHILLIPS, EA 2-2567. F

CHILD CARE OFFERED

CHILD CARE, small children, about 2 years of age, hot lunches, fenced back yard, play equip. OS 6-6458. G

CHILD CARE, toddlers or school age children, near York School, hot lunches, ample playroom. OS 5-2705. G

CHILD CARE WANTED

CHILD CARE, 3 girls, 2 to 5, Hollywood Riviera, 5-day week, must live close by, have own transportation, or live in. FR 5-7704. H

CHILD CARE, 2 boys, age 4 and 6, with room or apartment for mother, Inglewood or Hawthorne, day shift. MARY H. POUNDS, LU 8-7079. H

PERSONALS

WITNESS urgently needed who saw auto accident on November 4, 1954, at approximately 7:20 a.m., at the intersection of Prairie and Manhattan Beach Blvd. Cars involved were 2-tone green 1954 Sportsman DeSoto and gray 1950 4-door Chevrolet. FR 4-7155. L

APPRECIATION. We wish to thank our many friends for their sympathy and kindness at a time when it was deeply appreciated. MRS. CHARLES ATKINSON AND SON. L

". . . Show me something to prove you're cleared."

DESERT GOLF—. Distaff desert Norcrafters who meet at Antelope Valley Country Club are: Mary Fisher, Blanche Moore, Jackie Wagner, Jenny Alexander, Dorothy Falcetti, Shirley Schock, Claire Dougherty, Racine Norton.

HANDICAPPED GOLFERS—. Two unusually handicapped members of the Wednesday evening Engineering Golf League were presented special equipment by fellow golfers recently. Here Lowell "Fisherman" Meyer (usually found near water holes at course) snags hem to to attract attention of Nina Shoemaker to show his combination club-fishing rod. Grinning observers are Sid "Digger" Wheeler holding special golf course tree uprooter (or G.I. trench shovel); NRC Golf Comish Lee Johnson, expressing opinion on legality of equipment.

SPORTS

The Northrop News

Hottest Names In SC Whirl

NRC DRIVERS TOP LIST

Some of the hottest drivers in local sports car circles are members of the Northrop Sports Car club.

NRC drivers are competing in almost all of the local SC events and after each one the club invariably chalks up another trophy or two.

To back up this boast—here are some results of races and rallies held during the past month.

At the Bakersfield Road Race—a two-day grind held at Minter Field, and sponsored by the Kern County and California Sports Car clubs—Norcrafters placed as follows: Don Miller in a Crosley Special brought home two first place trophies in the Class H Modified category. C. K. Enoch followed Don with two second-place awards in the same class, same type car.

Ed Barker in a Porsche Speedster ran down a second and a third place in the Class F Production slot.

The Arrowhead Upsandowns Rally roared out with 72 entries and the point tally netted a first place to NRC drivers Harold Guess and Jack Kirkpatrick. Fifth place overall went to Bill Hanna and Dick Flude and the second-place team trophy was snatched by the NRC team.

The Northrop 5-car team came in for top glory at the annual Lockheed 24-hour rally where they took the Best of Team award. The grueling 650-mile 24-hour run paid off for the first 10 spots out of a 119 entry field and Doug Hugill and C. K. Enoch teamed up to take the fifth place award. Harold Guess and Jack Kirkpatrick rolled under the wire at ninth.

CH TO BE SHOWN NORCRAFTERS AT EXCLUSIVE SHOW

An exclusive performance of Cinerama Holiday will be presented for Norcrafters and their children.

The special Norcrafter Family Day showing will be held Saturday morning, July 21, at 10:30 a.m.

Added good news is the special reduced admission price of $1 per seat, including tax. The performance is primarily for children of Norcrafters so adults will be admitted only when accompanied by one or more children.

Ticket order forms for Cinerama Holiday are now available in Personnel Activities offices, all plants and facilities. These forms should be completed and returned to the PA offices no later than July 13.

SQUARE JETS TO HEAR NEW VOICE FOR DOS-A-DOS

A new voice will be ordering "swing your partner" for the NRC Square Jets next Sunday.

The new caller, Bob Richter, will be singing orders every fourth Sunday from now on. Other callers are Carl Malkow and Vera Berg.

The Jets dance every Sunday at Swimms Barn, 15016 Daphne Street, Gardena, from 7 to 10 p.m.

Dancing on the fifth Sunday of the month has been cancelled for the summer.

HENRY COOPER TAKES TOP AREA TM APPOINTMENT

Three years of constructive participation in Toastmasters activities culminated recently for Henry Cooper in his election to the Area Governor post.

Henry, a five year Norcrafter, is presently president of the Northrop Toastmasters Club #212.

A charter member of the Northrop Club, Cooper's first post was club secretary. He has been a staunch supporter of TM activities both in the Northrop Club and through area programs for the past three years.

AID

Your contribution to AID will help provide many of the necessities of life for those who are less fortunate. Are you giving your fair share?

See your department clerk or call at your nearest Personnel Activities office.

Down To Sea Is Summer's Tune For BC

Local Pacific waters are churning from the wakes of NRC Boat Club vessels.

Busy members are currently engaged in plans for a Fourth of July Cruise to the Catalina Isthmus. The cruise will be held on July 5, 6, and 7. Featured events will be the traditional steak fry on Saturday night, dances, and boating and swimming contests.

Reservations are limited to 150 people and may be made through the Personnel Activities office.

A highly successful cruise just past was the Memorial Day trip to the Isthmus. In spite of bad weather a record crowd in 41 boats sailed over and the pleasure of the trip more than compensated for the lack of sunshine.

The sail fleet raced back from Ship Rock to the L.A. breakwater on Sunday. The Skoya with Scott Rice and C. T. Strickler on board won in the over-26-foot class and Bob White's Wave Song topped the under-26-foot time.

Week's Date Reminder To Sport Minded

Swimming opens tonight. The Leuzinger High School pool is the place; Wednesday and Friday are the nights; 4:30 until 6:15 is the time. Bring your own towels, caps for the ladies, and children are welcome on Friday.

You have two more days to enter the June NRC Golf tourney. Entries close June 22. Play will be at Rio Hondo on June 30 and greens fees are $3.50. Tee time 11:30 a.m. until 1:30 p.m.

Especially don't forget to get tickets for the Skin Divers' show this Saturday. You will get a never-to-be-forgotten look at some excellent marine color photography as well as some valuable tips on the skin diving art.

NRC Good Time Table for July

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784.

ART CLUB (days), Joe Kalina
Meet in Annex every Thursday evening, 7-10 p.m. Life class—models furnished.

BIBLE STUDY, Roy Stahl
Meet daily, Plant 1, east mezzanine conference room, 11:15 a.m.; Plant II, Mon. and Thurs., Conference Room II; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ralph Cook
Meeting date for this month only has been changed to Monday, July 2, 7:30.

BOWLING (days), Wayne Chamberlin

BOWLING (night), Garland Steiner
Summer leagues now in progress.

BRIDGE CLUB, Tom Coates
Membership drive now on. All bridge players are welcome. Meet 2nd & 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Scott Budge
Meet in Annex 1st & 3rd Wednesdays of month, 7:30 p.m. Dark room facilities and lighting equipment available to all members.

CAMERA CLUB (nights) Gene Beck
Meet 1st & 3rd Saturday of month, 7:30 p.m.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30.

FISHING (day and night)
Register all fish for NRC awards with cards supplied by Personnel Activities.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m. Next: July 2.

GOLF (days), Lee Johnson
Summer leagues in session. NRC Open Tournament at Alondra Golf Course, July 22 & 29.

GOLF (nights), Pete Lower
Summer league playing at Western Ave. Golf Club.

GUN CLUB (days), Bob Kalkofen
Next meeting July 17. Representative of Fish & Game Dept. as speaker on new Fish & Game Laws.

GUN CLUB (Nights), C. B. Hays
Next meeting July 9, 12 noon. Election of officers.

MIXED CHORUS, Bill Porter
Meet every Tuesday, 7:30 p.m. Music, robes and accompanist furnished. Alto and base voices needed for musical pageant coming soon.

MODEL CRAFT CLUB, Bill Feldt
Meet first Monday of month, 7:30 p.m. Next: July 2.

PHILATELIC CLUB, Russell French
Combined philatelic and numismatic meets 2nd and 4th Mondays, 7 p.m.

RADIO CLUB, Paul Serafin
Meet last Thursday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening, 7:30 p.m.

SKATING CLUB (nights) LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday evening, 7:30 p.m., Redondo Skateland.

SKEET CLUB, George Swanner
Meet every other Saturday at Long Beach Dominguez Gun Club on Artesia Blvd., at 10:30 a.m. Next meets: July 7 and 28.

SKIN DIVING (days), Glen Combs
Meet 3rd Monday of month at 7:30 p.m.

SKIN DIVING (nights), Bob Larson
Meet 3rd Wednesday of month, 1 p.m.

SOFTBALL (days), Dave Heaps
Leagues now playing Mon. & Wed. at Rosecrans Playground, Tues. & Thurs. at St. Andrews Playground from 6:00 p.m. to 10:00 p.m.

SOFTBALL (nights), Dave Carney
Leagues now playing Mon. through Friday at Rosecrans Playground, 10:00 a.m. to 12:00 noon.

SPORT CAR CLUB, Bill Hanna
Meet 2nd Thursday of month, 7:30 p.m.

SQUARE DANCING, Angie Allen
Meet at Swimm's Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th Sundays.

SURF FISHING (days), Ed Rodish
Meet first Tuesday of month, 7:30 p.m. For July only, meeting changed to Monday, July 10.

SURF FISHING (nights)
Meet 1st Wednesday of month, 1 p.m. For July meeting only, date changed to Wednesday, July 11.

SWIMMING
Beginning June 20, the Leuzinger High School pool will be open every Wednesday and Friday until August 10. Adults only on Wednesdays—Family night on Fridays. Children must be accompanied by adult Norcrafter. Time: 4:30 p.m. to 6:15 p.m.

TOASTMASTERS (days), Henry Cooper
Meet every Thursday evening, 6:30 p.m., "The Cockatoo."

TOASTMASTERS (nights), Sam Grutsis
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING, Lee Hopkins
Women's league at Inglewood Bowl on Thursday evening at 6:15 p.m.

KNITTING, Thelma Martin
Meet every Monday evening, 7:30 p.m. Craft Room, NRC Clubhouse.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet every Tuesday, 7:30 p.m. Scout Cabin, 135 Grevillea, Hawthorne.

SOFTBALL, Pam Thompson
Practice games in session. Will play in the Los Angeles City League.

TOASTMISTRESS,
Meet in NRC Clubhouse Board Room 1st & 3rd Thursdays, 7 p.m.

Miles Takes James Strebig Award In L A Times Scorpion Series

BY MARVIN MILES

(Reprinted with permission of L.A. Times)

FAIRBANKS, Alaska, Nov. 14 (Delayed) — Sally Two, better known along our Yucan high-altitude track as Air Force Jet 4186, skimmed down through the mist and settled to the frozen runway at Ladd Field here today with two sister Scorpions to complete a 3000-mile hop-skip delivery flight from Palmdale, Cal., and take up her defense mission as one of America's Arctic interceptors.

Weighing in at 45,000 pounds gross, Sally is a husky, twin-engine F-89D, a deadly Northrop lady with gaudy, rouge-red wing tips and tail for quicker rescue in case she should founder in this white sub-zero world of ice and snow.

TWO SISTER SHIPS

With her throughout the hurtling air jumps and the chafing weather delays were Sally One and Sally Three, all bright new rocket-firing interceptors just off Northrop's final assembly line at Palmdale—all bound for assignment with the 433rd Fighter Interceptor Squadron here, Satan's Angels, a ready-to-go outfit that helps guard the continent's far-northern frontier 24 hours a day.

Checked out in high altitude flight, Times Photographer Larry Sharkey and I were authorized by the Air Force to accompany the mission, the first newspapermen granted USAF permission to fly a long-range jet fighter ferry operation.

It proved to be an eye-opener, with the chill hand of winter calling the tune under the strict Military Air Transport Service regulations governing our flight.

Sally Flight was led by Maj. John L. (Jake) Moutier, jr., senior pilot and commander of the 433rd FI Squadron, one of the nation's first combat jet pilots, a man who is going places with the Air Force and one who knows the treachery that lurks in the soft whiteness that spreads its frigid mantle across the top of the earth. With him was John W. Wallis, Northrop radar observer and graduate engineer.

Sally Two, my ship, was flown by Robert J. (Bob) Love, Northrop test pilot and military relations representative, a seven-Mig ace, soft-spoken, prematurely gray, with the look of an actor and the deft hand of a fighter.

Sharkey, in Sally Three, flew with Marvin (Whitey) van Salter, wry-humored former Marine Corps pilot.

From the first planning for a winter jet flight over the vast, snowy loneliness at the northern end of the world, you plan two ways:

To fly high and fast and snug over the bitter terrain between you and the next cup of coffee and to survive the raw, freezing cold if for some reason you have to "step out of the bird", as the pilots laconically refer to blowing yourself out of the cockpit at 30,000 feet and parachuting to earth.

Normally, flying requires thought and decision on planes and weather. Up here weather is watched with particular care, of course, but in this realm where the cold cuts through you like a scalpel you must be prepared and know the tricks of staying alive in temperatures that can turn you into ice in no time if you're not ready for them.

DEADLINESS OF COLD

The Alaskan squadrons face this extra hazard winter-long, every minute they are airborne, and, knowing the dangers, Maj. Moutier and Bob Love provided for Sharkey and me:

Flying suits, padded flight jackets, heavy fur-lined parkas, ear-muff helmets, padded, fleece-lined trousers, heavy fleece-lined outer boots, two sets of gloves (light and heavy), a long, sharp knife and a flashlight, together with a survival kit that contains, among other items:

A breakdown, combination rifle-shotgun, with ammunition; an ice ax, a snow saw, snare wires for catching small animals and birds, a heavy sleeping bag, three day's supply of concentrated rations, candles, mukluks, a signal mirror, compass, waterproof matches, chap stick and face ointment, fishing gear, first-aid equipment, extra socks, etc.

For some reason the interceptor crewmen call all this vital gear "garbage", but they wouldn't be aloft without it for a minute, for in one minute you can go a long way in a jet. They know this garbage can mean the thin line between living and freezing to death.

At Palmdale, at the start of our mission, we were given a thorough cockpit check-out in bright afternoon summer-like temperatures of 87 degs. We were shown how to buckle into parachutes, safety belt and shoulder harness, how to hook up to ship's oxygen and emergency (bail out) oxygen and radio connections, how to latch the harness tight, how to arm and fire both the cockpit canopy and the ejection seat if we had to "step out".

PILOTS CHAFE AT DELAY

At Hill Air Force Base, Utah, where we stopped the first night so the new birds—with only 10 hours on them in test—could be checked thoroughly by USAF crews before continuing north, the task of lashing ourselves in without help was comparatively easy.

But the picture changed at Great Falls, just below the Canadian border.

A rainstorm hit. Temperatures spiraled down to 15 deg. below and snow smothered the field by morning. At dawn the three Scorpions were frozen fast in ramp holes and loaded wings, fuselage and tail with an inch-and-a-half layer of ice that stuck like concrete.

It took full power to break them out of the freeze and hours of hard work to clean them off in the hangar, using boards to chip away the ice and brooms to sweep it clear.

RACE TO LASH IN

That's when Sharkey and I learned about subzero cold and the incorrigible habits of straps and buckles.

Bundled as we were, it was hard enough to walk, let alone climb up the Scorpion's ice-cold flanks and settle into the cockpits. But then we had to take off our gloves to lash ourselves in and it became a race to see whether we could find and lock the devilish hide-and-seek buckles before our hands froze.

All to no avail. The flight was aborted by a radio call from the tower. The weather up north had closed in. We were all buckled up with no place to go.

Next morning, the same routine again, the frantic hurry to beat the cold, the numbing hands, the bashed knuckles, the splintered fingernails. But this time we rolled.

THRILL OF TAKE-OFF

The excitement of a jet take-off in a bird like the Scorpion makes all the frenzy worth it. You're alone, for you can't see the pilot up ahead because of the radar gear. The only connection you have with sky and earth alike is the whistle of his breathing and yours in the oxygen mask and a few terse words over the intercom and the radio.

You see the lead ship quiver under the massive 11,200-pound thrust of the two roaring jets, see it jerk under the augmented thrust of after-burners that jump the power to almost 16,000 pounds, hear Jake's call: "Sally One rolling".

Then it's your turn. You feel the first burner come on while the brakes are still locked, hear Bob Love ask "All set?" You hear yourself answer "Roger" into the tight grip of the oxygen mask that covers your face from just below the eyes.

100 GALLONS A MINUTE

Sally Two is trembling now under the enormous power that surges within her. The brakes are released. "Sally Two rolling!"

The second burner comes on, like a kick in the pants. The snowy runway whips beneath you as the bird gathers speed and more speed second after second. You feel her lighten, as if she is rising on tiptoe. Then, at 155 m.p.h. and 4500 feet, she comes "unstuck" and soars off after Sally One.

The afterburners, forcing the fuel consumption to 100 gallons a minute between them for all-out take-off or combat power, are shut off as soon as possible and the bird slows noticeably. Sally flight turns on course, joins up in loose V formation and reaches for altitude over the white wastes.

Only then can you sit back and relax, watch the birds ahead and to starboard hanging almost motionless like blood-dipped arrowheads, streaming long contrails in the cold air, adding their own swirling cotton streamers to the glistening white earth and the soft whiteness of scattered clouds around you.

PACING THE SUN

Beneath, while the true-airspeed needle shows 450 knots or better than 500 m.p.h. at 25,000 feet, the marshmallow world moves under the wing in silent panorama, breathtaking in its beauty, with mountain peaks reaching up for you, great mounds of sun-splashed ice cream; frozen lakes like irregular puddles and pans of milk, meandering rivers chalked on the ground, snaking through snow-laden forests.

You land at Edmonton and refuel, take off for Ft. Nelson. A couple of cups of coffee and a half dozen cigarettes at Nelson and you're off for Whitehorse, flying west now, instead of north, boring into a setting sun that never quite sets because you're pacing it as you scorch over the curve of earth.

BLAST OF COLD

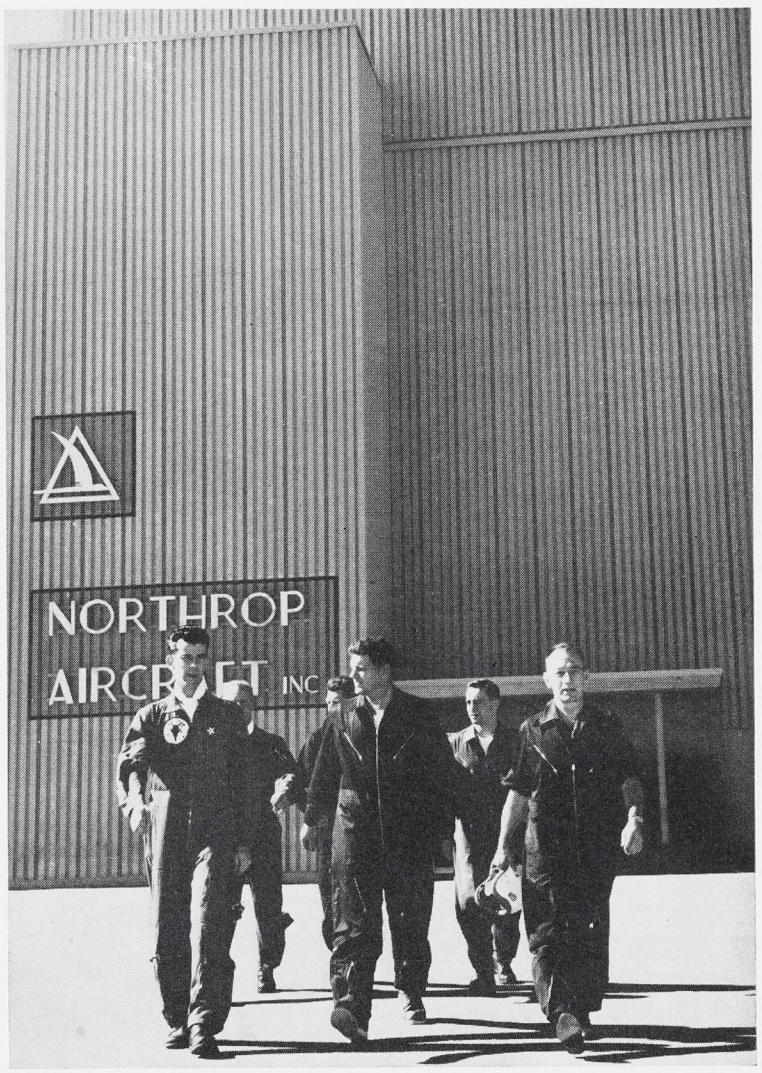
You slow on the approach and darkness catches you over Whitehorse. Sally Flight forms up tight, roars down into a bowl of white-orbed mountains and breaks clean and sharp above the airport, leader first, in tight-banked turns, one by one, for spacing in landing.

On the ramp, Bob opens the canopy. A cutting 20 below blasts through you to the marrow on the thrust of a light wind. You stow your helmet quickly, zipper your parka closed about your head, peeking out from the soft depth of fur, and slap your hands together in the thick gloves as you work awkwardly in the cold to haul your luggage out of wingtip stowage.

This is the land of Diamond Tooth Lil, Klondike Kate, Soapy Smith and Sam McGee.

At Ladd Air Force Base the next day you find the whole 433rd Squadron—plus Brig. Gen. T. Alan Bennett, commanding the entire 11th Air Division, standing in the snow ready to greet you.

From here, who knows? The Bering Strait, the Arctic, but to be sure, coverage of the job these jet jockeys are doing here in the frigid snows to protect you and me.



START OF ARCTIC ADVENTURE—. Trip whose account won Miles Strebig Award began at Palmdale, when this group strode to Scorpions. Front: Major Jake Moutier, Photog Larry Sharkey, Marvin Miles. Rear: Whitey Van Salter, Bob Love, John Wallis. Love piloted Miles.

SCORPION INSPIRED—. For the second consecutive year Marvin Miles, right, LA Times aviation editor, happily receives James J. Strebig award from Aviation Writer's Association for outstanding newspaper reporting on the subject of aviation. E. B. Berlinrut, left, representing AWA awards committee is shown presenting award.

The New - - - !

AFTER—. Following face lifting process, the Plant Three cafeteria took on appearance of a complete new building. Old booths were removed to make room for bright new tables and chairs, new lighting fixtures were installed, planters added for color, and the ceiling lowered.

NEW BUCK-FET—. Plant Three cafeteria Norcrafters, left: Larry Ventura, John Daniels, and Johnnie Cabias preside behind ingenious Buck-Fet line. The line—buffet lunch for a dollar—is popular one with Northrop folk. New illuminated menu boards add to pleasant surroundings of attractively decorated area. Come and get it!

Northrop News

NORTHROP ®

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, July 4, 1956

RELIABILITY — A MUST

TOP QUALITY STRESSED FOR SNARK

"Rugged reliability and serviceability—how well we design and build them into the Snark will govern the future success of the project."

So stated General Manager Robert R. "Bob" Miller in a personal message to all Norcrafters last Friday.

Paying high compliment to the many years of development that brought the Snark from a design concept to a flying reality, Miller said, "Engineering and production people, as well as those who are engaged in the many essential support activities, have performed a task that is a credit to themselves and to this company."

Reliability for the Snark, as it now exists as an end-product after having travelled the long road of development through the years, now becomes of maximum importance in the entire program.

Where a manned aircraft might require five to seven flights to be sold to the customer, missiles get no such "second chance". The missile first flight must be successful.

"Every individual on the program contributes to the success of that flight," Miller said.

Optimum reliability in the

(See Reliability, Page 3)

OCEAN MILES TO FIT SNARK

Great Britain has agreed to allow the United States to test fire guided missiles from Florida over British islands to Ascension Island—5000 miles in the South Atlantic, reports from Washington indicated last week.

Air Force officials were reported as stating that a range of this magnitude would permit full tests of such guided missiles as the Snark.

Norcrafters Take Care Via Nor-Aid

Norcrafters may be justifiably proud of the record they have written during the past months in outstanding support of their own NOR-AID charity program.

When Northrop first launched the AID program in August of last year, by special arrangement a percentage of undesignated contributions were set aside for NOR-AID, a program whereby Norcrafters help take care of their own in time of need. In addition, many Norcrafters chose to designate all or part of their contributions directly to the NOR-AID program.

The NOR-AID third quarter financial report, which appears in this issue of the News, shows the addition of $14,706.32 toward the fund. During this period 50 more Norcrafter families received grants under the terms of the program.

Contributions to NOR-AID during the nine-month period ending April 30, 1956 have reached a total of $28,787.48.

(See NOR-AID, Page 2)

Roland J. Pagen Retires Cilley Elected Treasurer

Roland J. Pagen, vice president and treasurer of Northrop Aircraft, last week announced his intention to retire, effective July 31, 1956.

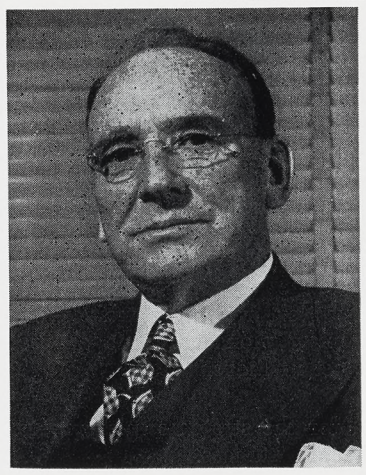
Whitley C. Collins, Northrop president, said the board of directors had known for some time of Mr. Pagen's desire to retire and regretfully acceded to his request. In order to retain the benefit of Mr. Pagen's advice and judgment in financial matters, he was elected chairman of the company's financial committee and will continue as a director of Northrop, Mr. Collins added.

Charles C. Cilley, assistant treasurer for a number of years, was elected treasurer, effective July 31.

Mr. Pagen, 69, joined Northrop in August, 1944, as plant controller and subsequently was named treasurer. He was elected a director in 1947 and was named vice president in March, 1950.

Recognized as an authority on

(See Pagen, Page 2)

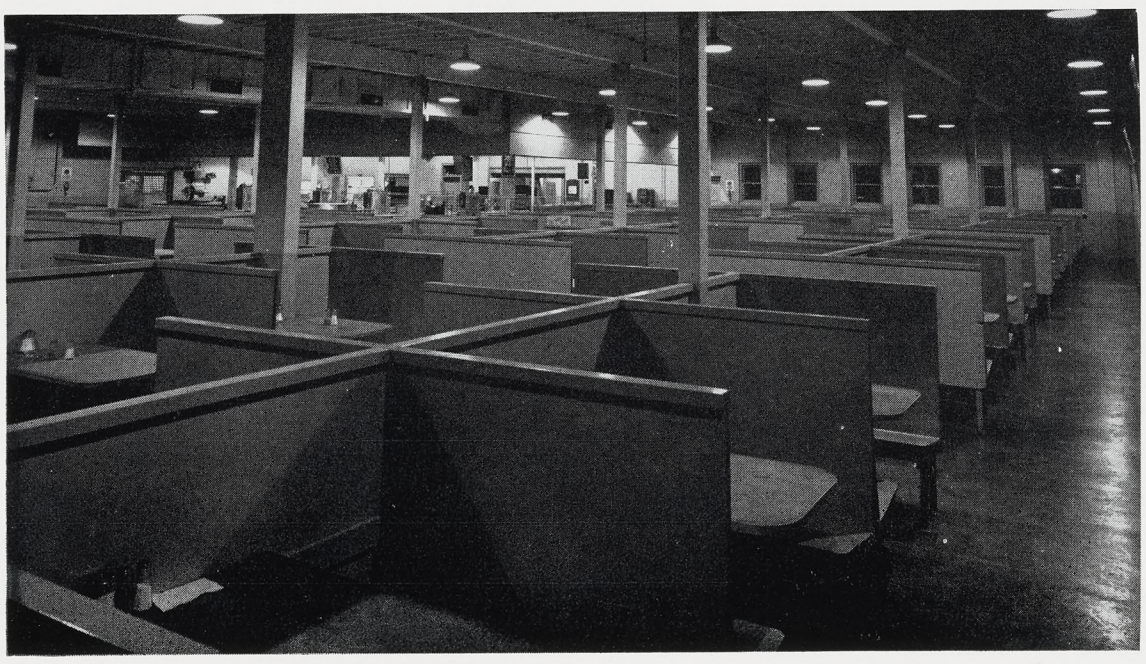


ROLAND J. PAGEN

CHARLES CILLEY

The Old - - - !

BEFORE—. Prior to redecorating activities at Crenshaw plant the old cafeteria area reflected a strict adherence to cleanliness and order but lacked a good deal in modern decorating ideas. Old gray-green tones are far cry from the bright new yellow and beige look of the present. Cafeteria has staunchly served and well, since war days.



Collins Issues NAI Report Company Status Outlined

A "state of the nation" report from President Whitley C. Collins was received last week by all Norcrafters in the form of a letter mailed to the homes.

The letter outlined the past, present and future conditions and prospects of the Company and gave an unaudited analysis of the company business results for the first nine months of the current fiscal year.

President Collins reported on the progress of the new supersonic trainer program and told briefly the reasons for halting efforts on the long-range interceptor.

Snark missile weapons program was stated as being in the best position in company history and a new order for the Snark was announced.

The report announced the coming necessity for layoffs in some areas because of the lead time necessary to develop and produce new airplanes and weapons.

Concluding, President Collins paid tribute to all Norcrafters for their loyalty and continued support of company ventures.

NOR-AID Report Shows $14,706 Added to Fund

(Continued from Page 1)

From this amount a total of 89 Norcrafter families from Hawthorne, Anaheim, LAX, Palmdale, Edwards, and Ontario have received $15,163.30 which purchased needed food, clothing, and medical aid in a time of financial distresss.

The NOR-AID financial report for the first and second quarters which appeared in the March 14 issue of the Northrop News showed Norcrafter designations to NOR-AID amounting to a total of $13,899.24. In addition, a contribution of $181.92 was received from the Northrop Management Club during this period.

In the months of August, 1955 through January, 1956 a total of $7285.49 was distributed to 39 needy Norcrafter families.

Upon receipt of a final report from the Associated In-Group Donors organization, the AID year-end finanical report will be presented for Norcrafters perusal.

NOR-AID REPORT

NOR-AID, INC. FINANCIAL REPORT—THIRD QUARTER BREAKDOWN OF RECEIPTS AND DISBURSEMENTS

* * *

FUNDS AS OF 31 JANUARY 1956

Bank of America, ...	$6,788.70
RECEIPTS	
NOR-AID Allocation from Undesignated contributions	$14,701.32
Cash contribution..	5.00
Total	$14,706.32
DISBURSEMENTS	
Grants to Northrop Employees	
Anaheim (2)	$ 225.00
Hawthorne (43)....	$ 6,882.81
Ontario (1)	200.00
Palmdale (4)	570.00
	$ 7,877.81
Miscellaneous Operating Expense—Bank Charges	$ 2.86
Total	$ 7,880.67

FUNDS AS OF 30 APRIL 1956

Bank of America, Hawthorne	$13,614.35

Pagen - - - - Retires

(Continued from Page 1)

corporate finance, he has been prominent in Southern California financial circles for 30 years. Immediately prior to joining Northrop, Mr. Pagen was treasurer and controller of Avion, Inc., in Los Angeles. He was chief financial officer of the Richfield Oil Company in receivership from 1930 to 1937.

Cilley joined the Accounting Department of the Finance Division in 1942 and supervised important accounting work until 1947 at which time he was transferred to the Office of the Treasurer and devoted his entire time to the Company's financial matters.

In 1951 he was elected Assistant Treasurer and in this capacity he became very familiar with all the Company's financial planning.

Prior to joining Northrop he was employed by the State of California in the position of field representative.

Herdrich to Head Master Planning

Harold E. "Hap" Herdrich has been appointed director of the newly established Master Planning department—1900—according to a recent announcement by Robert R. Miller, Northrop vice president and general manager. Herdrich will report to C. H. Miller, vice president, Administration.

Hap began his association with Northrop in May of 1949. In August, 1955, he was promoted from assistant manager, Industrial and Plant Engineering, to staff assistant to the president—

H. E. "HAP" HERDRICH

which position he held until his present appointment.

Herdrich has had many years of industry experience in planning and related fields. Prior to joining Northrop he was supervisor of Production Planning for Douglas Aircraft's Santa Monica division and superintendent of planning and production control departments for the Pullman Car Works in Chicago. He has been active in the Society of Automotive Engineers organization for the past five years.

Scorpion "J" Undergoes Holloman Firing Tests

First firing tests with the newest member of the Northrop F-89 Scorpion family — the F-89J— conducted at Holloman AF Base last week proved highly successful according to a report from Director Max Stanley, Northrop Flight Department.

Prime purpose of the tests is to qualify the F-89J for firing from a flight safety standpoint. The tests will also provide Flight Test, Engineering, Inspection, and Manufacturing departments with other vital test data.

Holloman trials are being conducted by approximately 20 Norcrafters, representing the above mentioned departments, who are on temporary assignment to Holloman from their home base at Edwards. They are functioning under the Northrop Flight Department directorate recently set up at Holloman for conduct of the F-89J armament test program.

Ralph Friesen, assistant base administrator at Edwards, is administrating the present series of tests at the New Mexico base.

Old hand at Holloman facility operations is Northrop Experimental Test Pilot Jack Wells, who is flying the J tests. Jack was formerly at Holloman with the early Snark flight test program.

The current series of tests is expected to last for approximately six weeks. The Norcrafters on this particular Holloman program will then check out of their temporary lodgings and return home for a while— and they will be back again later for additional series of firings.

Holmes — Power Plant Chief Details Northrop Trainer

A new supersonic jet training airplane will enable U. S. Air Force pilots to learn to conquer the sonic barrier quicker and at less expense because new principles of "human engineering" are being applied to the cockpit design.

William Holmes, chief powerplant engineer for Northrop, declared last week that human factors research engineering—a relatively new field in aeronautical design—is being employed to devise operational simplicity—"something harder to achieve than complexity"—in the new supersonic jet trainer this company is developing under Air Force contract.

Holmes was the principal speaker at a meeting at the Biltmore hotel of the Rensselaer Club of Southern California. The engineers' organization is composed of alumni of Rensselaer Polytechnic Institute of Troy, N.Y.

Scientists with dual experience in aeronautics and in the fields of psychology, physiology and anthropology have examined this new airplane design in the light of a "man - machine system," Holmes said.

New airplanes are becoming so fast and fly so high, it is necessary to think of the pilot as an integral—and, obviously, most important—part of the aircraft, just as the engine or autopilot are parts of the airplane. Specifications and slide rules tell us easily the limitations on performance that engines and other vital equipment place on a new design. While it is not logical or desirable to apply slide rule technique to some human values, scientists now find it possible to predict within practical limits a pilot's ability to perceive, react and act.

"In this new trainer, which appears destined to become the 'world's fastest flying classroom', we have incorporated features that will teach the student pilot to rely on his ability to reason and react, but the cockpit will not contain so many buttons, instruments and gadgets as to exceed his ability or capacity to act," Holmes said.

"As a result, the student pilot will find he can make the big step from sub-sonic to supersonic flight with a great deal less difficulty than has been possible in the past," he concluded.

Northrop recently was awarded a contract for the training airplane. Long a secret project, few details have been released concerning the new airplane.

Snark Fact Sheet

GENERAL DESCRIPTION:

The U. S. Air Force's Northrop Snark SM-62 is the first U. S. long range guided missile. A number of successful launchings of the Snark have been conducted at the Air Force's Missile Test Center, Patrick Air Force Base, Florida. The long range pilotless bomber has a long, slender fuselage, a sharply-pointed nose, a swept wing configuration and a tail consisting only of a vertical stabilizer. The thin wings have a "sawtooth" leading edge. Elevons — combination ailerons and elevators — on the trailing edge of the wing eliminate the need for a horizontal tail. Snark missiles are produced by Northrop in its main plant at Hawthorne, California. Northrop, a pioneer in the guided missile field, began the Snark project in March, 1946.

PURPOSE:

The Snark SM-62 was designed for the strategic mission—to deliver warheads over intercontinental distances.

TACTICAL ASSIGNMENTS:

A number of successful launchings of the Snark intercontinental missile have been accomplished at the USAF missile test center at Patrick Air Force Base, Florida.

ARMAMENT:

The SM-62 is designed to deliver a nuclear warhead.

PERFORMANCE:

Details of performance have not been released by the Air Force for reasons of military security.

GUIDANCE:

Automatic, self-contained.

SPECIFICATIONS:

Dimensions:

Overall length — 74 feet
Wing span — 42 feet
Height — 15 feet

RANGE:

Classified.

POWERPLANT:

The Snark missile is powered by a Pratt-Whitney J-57 Turbojet engine. During launchings it obtains its initial acceleration from two booster rockets attached to the fuselage which are jettisoned after use.

Nine Wise Owl Norcrafters— Shop Area Glasses Pay Off

Northrop's Wise Owl Club — five months young, now numbers nine full fledged members.

When safety glasses saved the sight of Norcrafter Donald Clark, Machine Shop, the club had a charter member. (See Northrop News, January 18, 1956.)

The Wise Owl Club of America is the parent organization. Purpose is to save sight. There are over 8000 members in all industries from coast to coast who are happy to belong.

Northrop's nine members, in addition to Clark:

Art Gollwitzer, Sheet Metal.

Bill Graham, Missile installation and Final Assembly.

Irving Dwosh, Machine Shop.

Dave Lopez, Tooling Machine and Die Shop.

Henry Johnson, Spar, Trunnion, and Bearing Assembly.

P. E. Romero, Plaster Shop and Foundry.

Bill Hofmann, Welding Shop.

John Lofy, Advanced Tool Fabrication.

One of the strongest Northrop factors in boosting the Wise Owl way of life, is the Northrop practice of requiring safety glasses to be worn in many production and test areas.

Under the 100 per cent eye protection program, certain parts of the shop have been posted as areas in which it is mandatory to wear safety glasses. The areas are all plainly posted and personnel in the areas make it a point to advise visitors of the 100 per cent requirement.

Norcrafters who are caught without eye protection, may obtain glasses from tool cribs, department supervision or department clerks.

Norcrafters who are regularly assigned to the 100 per cent eye protection areas—Wise Owl areas—are required to be properly fitted with permanent safety glasses through the Safety Engineer's office.

Northrop News

Vol. 10 Northrop Field, Hawthorne, Calif. No. 22

Published every other Wednesday
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
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News office phones—2456, 2457. Outside lines—OR 8-9111, OS 5-4611.

NSA OFFICERS-MEMBERS—. Several Northrop secretaries took important jobs at recent installation of officers for Airborne Chapter of National Secretaries Association (International). Pictured from left: Joan Olson, communications committee chairman; Laura Coonradt, corresponding secretary; Dorothy Moore; Mamie Colombo; Eva Baldwin. Marian Wallace, not pictured, was elected first vice president of the organization. Scene was Fox Hills.

Reliability --- Miller

(Continued from Page 1)

Snark is therefore due for primary emphasis, it was outlined. Highest standards of design and production are required.

Missiles break precedent with manned aircraft, Miller pointed out. "A missile must meet more extreme environmental requirements; there are few duplicate or emergency systems, and most important, there is no opportunity to fix pilot squawks."

To achieve the absolute of optimum Snark reliability, a three-step program was detailed:

1. Re-examining all of the accepted aircraft design and production standards to assure their applicability to missiles.

2. Building quality into the product through applying the highest standards of workmanship in the shop.

3. Conducting rigid and uncompromising inspection of the end products to assure that all applicable requirements have been met.

"Airman Smith" Film Wins High Honors at Cleveland

An Oscar and certificate have been awarded Northrop produced film "Airman Smith" at the Ninth Annual Cleveland Film Council Festival, it has been announced.

The awards, highest in the field, were in the category—career-guidance-recruitment and training.

"Airman Smith", a 28-minute 16mm color film was released just last May 19. Release was timed to coincide with Armed Forces Day, May 12, (See Northrop News, May 23, 1956.)

Release timing permitted an audience of several millions of Americans to view the film during first weekend. Also, because "Airman Smith" carries a powerful message to encourage Air Force recruiting and re-enlistment, the Air Force cooperated in the production of the movie and also in its release.

The film is an authentic representation of events that lead up to and follow the decision of a young man who decides to become an airman. Locations, equipment and starring personnel are authentic. Most of the film was shot on United States Air Force bases and the Northrop Scorpion was used for a series of thrilling aerial sequences.

Production and distribution of the Northrop motion picture are under the cognizance of Public Relations. Information concerning production and release of "Airman Smith" can be obtained by contacting Bill Cox, Public Relations, Northrop Aircraft, Inc., Hawthorne, California.

IT SHOULDN'T HAPPEN—. When Palmdale NRC Golf Comish Warren Symington (the anguished gentleman on the left) brought the trophy winners in recent Antelope Valley golf league to clubhouse to be photographed, unscrupulous promoters of the El Baile De La Fiesta (NRC dance) plopped sombreros on the unsuspecting heads of, second from left: Rol Owen, C. D. Shippard, Tom Post, E. W. Huckabey and Paul (Siesta) Sheeley. The dance is July 7 at the NRC Clubhouse, Palmdale—attire—informal.

"Going My Way" forms are available from department clerks at all Northrop facilities, from PA offices, the Personnel department, Industrial Relations offices, lobbies, and the Northrop News Office.

Deadline is Wednesday noon before publication.

AID

Your contribution to AID will help provide many of the necessities of life for those who are less fortunate. Are you giving your fair share?

See your department clerk or call at your nearest Personnel Activities office.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 3)

HOLT & MAIN ST., Pomona. F. C. RHODES (5620-11092, Ext. 2409), LY 2-4055. 12-3

(Zone 5)

ORANGETHORPE & HWY. 39, Buena Park, Anaheim. (From Orangethorpe & 39 over to Artesia Blvd. and out to Northrop.) T. M. ELROD (5501-17641, Ext. 2200, 1814). 12-5

7:30 a.m. — 4:15 p.m.

(Zone 1)

VICTORIA & 74TH, Los Angeles. (Crenshaw & Florence to Plant II, have parking pass.) T. D. ODELL (3861-29965, Ext. 2532), PL 2-2655. 13-1

(Zone 5)

ROSECRANS & VALLEY VIEW or farther out Rosecrans, La Mirada. (Interested in forming a car pool.) DICK KING (3331-44068. Ext. 2314), OX 7-9309. 13-5

(Zone 7)

VERMONT & 182ND, Gardena. GRACE MATHEWS (4100-13375. Ext. 2331). 13-7

NORMANDIE & 186TH, Gardena. W. M. LUND (3542-13614, Ext. 567). DA 9-6021. 13-7

(Zone 8)

CRENSHAW & 174TH or Prairie & 174th, North Torrance. (Prefer car pool, can go down either Prairie or Crenshaw.) JOYCE L. RANZENBERGER (3880-12500, Ext. 1230), DA 9-6118. 13-8

(Zone 9)

COMPTON & PRAIRIE, Lawndale. JOHN GABALDOW (5920-38321, Ext. 1231), OS 5-3229. 13-9

(Zone 13)

STRATHMORE DR. & GAYLEY, West Los Angeles. (Route: Wilshire & Sepulveda to Plant; interested in car pool.) CHUCK BENSON (3146-44346, Ext. 1391), GR 3-2745. 13-13

(Zone 14)

HOLLYWOOD WAY & MAGNOLIA BLVD., Burbank. (Hollywood Frwy. to Crenshaw Blvd.) HARTLEY H. KING (3273-15841, Ext. 1224), TH 8-9022. 13-14

CAHUENGA & MOORPARK, No. Hollywood. JACK SHUPPER (3554-44348, Ext. 1522), PO 1-5422 or ST 7-7283. 13-14

7:30 a.m. — 5:15 p.m.

(Zone 12)

ALTA AVE. & OCEAN DRIVE or 4TH ST., Santa Monica. (Can accommodate 4 or 5 passengers.) ALFRED ROMAN (3546-44513. Ext. 2342), EX 5-8572. 14-12

RIDES OFFERED

4:45 p.m. — 1:15 a.m.

(Zone 6)

SPRING & PALO VERDE, Long Beach, K. N. ANDERSEN (5563-22097), Ext. 2011). GA 1-3508. 18-6

(Zone 9)

ANZA & TORRANCE BLVDS., Torrance. (Can pick up and leave 4 riders anywhere between Anza & Torrance Blvds. going east to Crenshaw and then north to Plant.) J. GILMER (5131-43649, Ext. 2002), FR 9-8775. 18-9

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 3)

MAIN & 96TH STREET, Los Angeles 3. DOROTHY E. KANDLER (5507-34972, Ext. 526), PL 4-6700. 2-3

HOLT & MAIN ST., Pomona. F. C. RHODES (5620-11092, Ext. 2409), LY 2-4055. 2-3

(Zone 5)

MAIN & 17TH, Santa Ana. FRANK KENNEY (5336-44154, Ext. 2256), KI 3-5031. 2-5

(Zone 9)

TORRANCE BLVD. & HELBERTA, Redondo Beach. LOUISE STELP (5351-34515, Ext. 1318), FR 9-7706. 2-9

7:30 a.m. — 4:15 p.m.

(Zone 4)

FIGUEROA & 120TH, Los Angeles 61. DEE RIVELLO (1421-12239, Ext. 691), PL 6-3818. 3-4

(Zone 5)

CONANT & BELLFLOWER, Lakewood. AUDREY M. COLLINS (8400-18210), Ext. 1492), GA 5-2528. 3-5

E. COMPTON BLVD. & ACACIA, Compton. JODY E. CASSATT (9320-27689, Ext. 2151), NE 1-0531. 3-5

ROSECRANS & VALLEY VIEW or farther out Rosecrans, La Mirada. (Interested in forming a car pool.) DICK KING (3331-44068, Ext. 2314), OX 7-9309. 3-5

COMMONWEALTH & CYPRESS, Fullerton, (Point of ride does not have to be above streets but should be in Fullerton area.) R. A. BURGER (5152, Ext. 1958). LAmbert 6-2791. 3-5

(Zone 7)

FIGUEROA & 215TH, Torrance. (Car pool considered.) N. K. YOUNG (3730-4481, Ext. 2351), FA 8-8903. 3-7

(Zone 8)

PALOS VERDES BLVD., Torrance. (Need ride home only; but will take one for both ways.) WENDY THWAITS (1421-12202, Ext. 691). 3-8

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 8)

CRENSHAW & 174TH or Prairie & 174th, North Torrance. (Prefer car pool, can go down either Prairie or Crenshaw.) JOYCE L. RANZENBERGER (3880-12500, Ext. 1230), DA 9-6118. 3-8

(Zone 9)

PACIFIC COAST HIGHWAY & AVE. F, Redondo Beach, KENNETH E. SMITH (3330-30405. Ext. 1837) FR 5-1170. 3-9

(Zone 10)

COMPTON BLVD. & INGLEWOOD AVE., Lawndale. BESS PHILLIPS (3310-43780, Ext. 2563), EA 2-2657. 3-10

(Zone 11)

GRAND & VIRGINIA, El Segundo. CAROL A. SIMONEK (9320-38960, Ext. 2151), EA 2-1540. 3-11

(Zone 12)

HAWTHORNE & IMPERIAL, Lennox. LORETTO L. THORNTON (8620-44298, Ext. 2629). 3-12

COAST HWY. & CULVER BLVD., Playa Del Rey. JEAN CHURCH (8320-37306, Ext. 1832), EX 8-0925. 3-12

(Zone 13)

STRATHMORE DR. & GAYLEY, West Los Angeles. (Route: Wilshire & Sepulveda to Plant; interested in car pool.) CHUCK BENSON (3146-44346, Ext. 1391), GR 3-2745. 3-13

CULVER BLVD. & OVERLAND AVENUE, Culver City. MARY T. G. PIERCE (3350-44768, Ext. 1451) VE 8-4523. 3-13

MOTOR AND WASHINGTON or Venice Blvds., Culver City. IDA LOVAS (8320-44379, Ext. 2386, 1832) VE 8-0305. 3-13

(Zone 14)

HOLLYWOOD WAY & MAGNOLIA BLVD., Burbank. (Hollywood Frwy. to Crenshaw Blvd.) HARTLEY H. KING (3273-15841, Ext. 1224), TH 8-9022. 3-14

CAHUENGA & MOORPARK, No. Hollywood. JACK SHUPPER (3554-44348, Ext. 1522). PO 1-5422 or ST 7-7283. 3-14

4:45 p.m. — 1:15 a.m.

(Zone 4)

SO. GAGE AVE. & ATLANTIC BLVD., Bell. JOSEPH ROCHINA (5930-39367, Ext. 2488). 8-4

Miscellaneous — (Split Shift)

(Zone 1)

ARLINGTON & WILTON, Torrance. (Hours: 6:45 to 3:30 or 7:15 to 4:00.) ADELINE BATES (6455 - 25859, Ext. 3-1281), LU 9-1637. 10-1

(Zone 3)

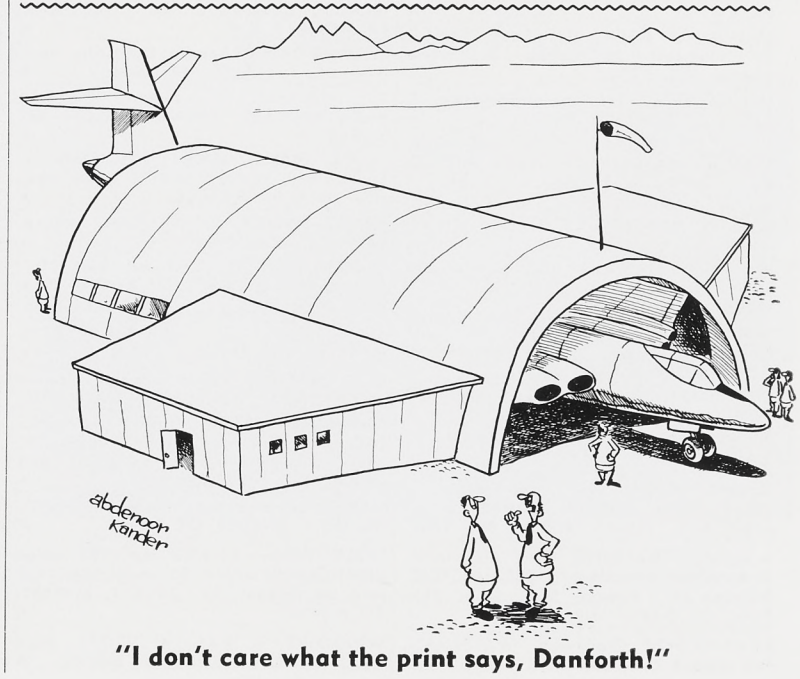
ONTARIO. (Could meet driver in Pomona or Ontario. Hours: 4:15 p.m. to 12:45 a.m.) HAZEL HEWITT (1422-10880 Ext. 688) YUkon 6-6289. 10-3

GROUND SUPPORT DEPARTMENT SET TO AID SNARK—OVER 300 ITEMS

Northrop Aircraft has established a new Ground Support and Test Equipment department to meet increasing requirements of ground support equipment for U. S. Air Force Snark SM-62 intercontinental guided missiles.

Harry J. Schwartz will head the new department, which will coordinate production of nearly 300 separate ground support equipment items from final assembly test fixture to launching platforms.

Northrop Snark weapon system consists of: the missile; ground support equipment — which includes guidance support equipment, ground handling devices and test fixtures—packaging and complete analyses of manpower requirements, logistics and tactical application.



"I don't care what the print says, Danforth!"

BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

Use regular Barter, Buy, Sell or Free Form 19-308 (10-53) available from stationery stockrooms, department clerks, Northrop News office, Personnel Activities, plant lobbies.

Ads will be run one time only. If you wish the ad repeated, please fill out another form and forward to the Northrop News Office, Department 1320, Zone 65.

Box numbers will be provided to Norcrafters who do not have home phones or who do not wish calls. Replies to box numbers are to be in writing. Box number replies will be forwarded by the News Office without delay.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday one week before publication.

FOR SALE

STUDEBAKER, 1948 convertible, new motor. $200. LEO R. WEISS, EX 8-0500.

HOUSE, 3-bedroom, rumpus room, tool shed, tennis court, fireplace. Hawthorne, $14,500. OS 6-8118. A

OUTBOARD CRUISER, 18', Merc. "50" electric starting, sleeps two, fibreglassed, custom trailer. OS 6-2383, after 5 p.m. A

ICE SKATES, boy's, size 2, $5; Great States featherweight LAWNMOWER, $20; all wool SLEEPING BAG, used once, $15. JAMES RINGO, GA 9-3695. A

AUTOMATIC WASHER, ABC, $125 or offer. R. KELLER, FR 9-0382. A

GAS RANGE, Gaffers & Sattler, $50; marble-topped antique COFFEE TABLE, $35; pair wing barrel tapestry CHAIRS, $15 each; gilt-framed WALL MIRROR, $7.50; tenor GUITAR (Martin), case, $45; BASSINETTE; oak TABLE LAMPS, hand carved, no shades. V. J. CORSO. OS 5-5193. A

AUTOMATIC WASHER, Kenmore, 3 yrs. old, with Suds Saver, $65. LOIS LUGO, PL 2-1117. A

FORD, 1937 ½-ton truck, overload springs, $65; temporary house wiring TIE-IN POLE, wired for 110 and 220, waterproof, $50. DICK CARMICHAEL, TE 3-0346. A

DE SOTO, 1938 coupe, best offer. TO 4-6268, after 5:30 p.m. A

FORD, 1948 convertible, $125. FRED MAGIDSON, PL 5-2798. A

FORD COUPE, 1940 ¾ race. STANLEY DICKEE, PL 4-0422. A

HOUSE, 2-bedroom, large bedroom, utility room in rear, w/w carpeting, furnished, near Northrop, $14,950. OR 2-9206. A

CHEVROLET PICK-UP, 1935, good condition, $175; JEEP, 1945 Army Willys, 4-wheel drive, new top, $595. OS 6-6390. A

SKIS, 6'-10", laminated, plastic surface, clamps, metal tips, edges, $20. OR 8-2007. A

MOTORCYCLE, 1946 (74 cu. in.) overhead Harley-Davidson, $249, $125 cash and weekly payments to suit, no interest charge. OR 1-6070, between 10 a.m. and 3 p.m. A

OLDSMOBILE, 1949 4-door sedan. $350. E. K. HEDGES. JAckson 7-4534. A

ACCORDION, Wurlitzer, 120 bass, ivory. HOWARD B. PARSHLEY, OS 6-0652. A

NASH RAMBLER, 1956, just won in raffle, best offer over $2600. A. M. STEED, JR., EX 8-5228. A

DETECTRON, Geiger counter, earphones and mineral samples, $50. BOB CLARKE, Box 2203. A

WRIST WATCH, 17-jewel Bulova, reasonable offer. OR 4-1580, between 5 and 7 evenings. A

RECORD CABINET, mahogany, 35" high, 2 shelves. $25. HAROLD L. FAIRCHILD, EX 5-0575. A

HOUSE, 3-bedroom, Manhattan Beach, 5½ years old, fireplace, patio, 4% loan, $12,000; GUITAR, electric Hawaiian, Sears' best, $35. FR 2-8605.

HOUSE, modern, 2-bedroom, near schools, bus, fenced, 3 years old, $8500. OS 5-5306. A

GOLF CLUBS, complete set of 9 matched, PGA registered, $30. J. R. EMERSON, DA 4-4270. A

SWIMMING POOL, Doughboy, plastic, 18' diameter, 36" deep, used one month. OS 6-2892. A

MOTORCYCLE, 1942 Harley-Davidson 45, $100. G. LUKE, OS 5-1581. A

WEIMARANERS, AKC, CH, one male, $75; one female, $35, ready July 20. S. J. HARRY, EX 8-5084. A

MALL SAW, practically new, 8"; 4-power RIFE SCOPE. H. R. DENNY, DA 4-1670. A

REDWOOD FENCING, used boards and posts, about 30' in 6'x5' sections. A MIERSCH, PL 4-0778. A

HOUSE, 2-bedroom, corner lot, near school. Lawndale, small down. FR 4-8905 or OR 8-2339. A

CHEVROLET, 1941 club coupe, $50. OR 7-7714, after 4:15 p.m. A

RECORD PLAYER, RCA 45 rpm. $7. FR 5-3149, after 5 p.m. A

DINING ROOM SET, hard maple, 6 chairs, $200; UTILITY TRAILER, needs paint, $25. PHILIP TRIPOLI, Box 2204.

WASHING MACHINE, Thor Automagic, dishwasher attachment, $35; BICYCLE, Schwinn 26", 2-speed, $25. C. W. SEXTON, OS 6-4449, after 5 p.m. A

LAWNMOWER, Craftsman. WATERMAN, WE 5-6824. A

NASH, 1948 Ambassador coupe, $60, or best offer. E. R. SOLLY. OS 6-0547. A

DODGE, ¾-ton weapons carrier, cabbed in. W. F. WALTERS, PL 1-5491, after 5 p.m. A

TV, 1951 17" Zenith, mahogany console, $30; TRUCK, pick-up, ¼-ton 1936 Chevrolet, $75. R. C. GOING, FR 6-1270.. A

PONTIAC, 1949 2-door sedan, $275, may take payments. ROY SCHNEIDER, PL 8-8812, Thurs. or Friday. A

CHIHUAHUA PUPPIES, longcoat, AKC champion sired. G. KIBODEAUX, OS 6-3651. A

BOAT STOVE, stainless steel, alcohol, $10; LAWNMOWER, $5. A. CALMAN, JR., TO 7-8270. A

OUTBOARD MOTOR, 1955, 7½ h.p., Elgin gear shift, $115; ENCYCLOPEDIAS, 12 volumes; ELECTRIC SHAVER, Schick, 1955, $8. PL 4-8117. A

HOUSES, 2, 2-bedroom stucco, on one lot 40'x306', space to build, income $85 per month or $165 income for both houses. PL 5-5118. A

DRAPES, coral antique satin, 10 panels, approx. 4'x7', valence, $75. CR 6-0822, afternoon. A

HOUSE, S.F. Valley, 2 bedrooms, large den, large lot landscaped, $17,500, Woodland Hills. DI 7-1400, evenings.

SOFA, matching CHAIR, Kroehler, dark green frieze, $65; 20' combination step-extension LADDER, $10. B. E. RUNSRICK, OR 7-3514. A

OLDSMOBILE, 1948 "98" 4-door, $250, will finance. TO 6-3349. A

HUTCH-DINING ROOM TABLE, combination, maple, wormwood finish. $100. MARY BEELER, OR 7-3289. A

MERCURY, 1950 4-door sedan, $600. R. HENKHAUS. OS 6-4697. A

SKI-BOAT, Mandella hull, modified Olds engine. NE 5-0486. A

CHEVROLET, 1949 2-door sedan, $275; SKIS, BOOTS, BINDINGS AND POLES, ladies' size 7½, $65. ELSIE WILLWATER, FR 5-8511. A

STUDEBAKER, 1953 V-8 5-pass. coupe, $985 cash. STEVE ELLO, JR., FR 9-4964.

PIANO, $125. D. R. FARRELL. OS 6-4709. A

HOUSE, 2-bedroom, Hawthorne, clean, older, $6800, $1500 down. OS 6-6956.

BUICK, 1947 station wagon, $200 or offer. RALPH PARKHURST, Box 2209. A

GAS RANGE, all white. $25. OS 6-0675. A

GOLF CLUBS, matched set, 4 Spaulding woods, $30. PL 6-2242. A

BICYCLE, boy's, 26"; Maytag WASHER; small GAS HEATER. HOMER A. RALLES, PL 6-7284. A

MOUNTAIN CABIN, large, 3 rooms, sun porch, fireplace, furnished, sleeps 10 or 12, San Gabriel Mountains, $1795, $400 down, terms. EA 2-1036 or DA 9-1930. A

RUG, 9'x15', blue leaf pattern, w/pad, $30. PL 6-7750. A

REFRIGERATOR, 7.6 cu. ft. GE. OR 1-9274. A

PONTIAC, 1956, 860, 227 h.p., $450 for equity, take over payments of $77 month. AX 3-0853. A

IRONER, Conlon. J. M. CORCORAN, FR 5-4049. A

WASHER-DRYER, Bendix Duomatic, gas, 6 months old, $350. FR 2-9280. A

TV, Silvertone, 12" picture tube out, audio fine, $20. CHUCK BENSON, GR 3-2745. A

TRUCK TRANSMISSION, 1950 Ford 4-speed, $25; ROLLER SKATES, shoe type, size 10, $10. TO 4-3486. A

HOUSE TRAILER, 27' Mayflower deluxe, best offer. Box 2207. A

CAMERA TRIPOD, Davidson Star "D", $8. ROBERT L. KOBEL. OR 8-6896. A

FORD, 1953 Victoria, $1050. FR 2-9497.

BUICK, 1948, convertible. $225. C. T. DORSETT. DO 7-5928. A

VOLKSWAGEN, 1954 sedan, never raced, $1495. JIM MINTER, DA 6-4195.

CHEVROLET PARTS, 1941; DINING TABLE, 6 chairs, $25; 16" Olympic TV, new picture tube, $65; COUCH and CHAIR, $10. OS 6-8050. A

PIANO, small grand, Brambach, $295. AGNES E. SNYDER. OR 2-1402. A

TABLE, yellow, Formica top, $8; junior HIGH CHAIR, maple, $5; small TRACTOR (can be ridden). $3. JACK F. KIRKEBY, TO 6-5438. A

WINDOWS, 6, 2'x4'; 4 DOORS, 6½x 2½'. DAVID BOTELHO, OS 5-7702. A

FOR SALE

GAS RANGE, Estate, $40; gas-steam combination HEATER, $25; TYPEWRITER, capital letters only, $8; SCREEN DOOR, guard, hinges, $2; perspective DRAFTING MACHINE, $5. PL 4-9637. A

REFRIGERATOR, 7', Crosley Shelvador, $80; WHEELBARROW. $10. WAYNE CURIE, FR 5-8778. A

RUG, pad, 9'x12', flower, beige, $15; DRAPERIES, 2 pr. rose, lined, 2 pr. dark green, lined, 2 pr. red print, lined, $5 pair. DA 4-0335. A

REFRIGERATOR, Philco, 8 cu. ft., $40; window-type CAR COOLER, $3.50. FRANK RICHMOND, OR 2-3648. A

HOUSE, view, Rolling Hills area, lot 87'x166', large den, fireplace, $21,900. FR 7-1170. A

CABIN CRUISER, 18' Alcraft, 40 h.p. outboard, trailer. FR 9-9570. A

SHOE SKATES, J. C. Higgins, girl's, size 4½, $10. BEELER. OS 6-8316. A

HOUSE TRAILER, Alma, 16'-18', tear drop, aluminum sides, $95. PL 6-0774.

DACHSHUND PUPS, AKC, $50; Sears deluxe INNERSPRING MATTRESS, box springs, $20. AL HERRING, OS 5-4994.

MOTORCYCLE, 1953 Indian Brave, $200. WESLEY E. CURRIER, OX 3-8332. A

BENCH SAW, 8", mitre gage, $20. C. S. HOHN. DA 4-5961. A

REFRIGERATOR, 8 cu. ft., GE; upright PIANO; German LUGER. J. EBY, DA 9-7176. A

RIFLE, Winchester model 98, 348 cal., $75. J. H. REAMES. OS 5-6222. A

DACHSHUND PUPS, all red, available about July 20, $30. FR 9-4189. A

DINETTE SET, chrome, 5 piece, $35. R. F. ACKERMAN, FR 9-8059. A

LOTS, two 60', and 3-bedroom HOUSE, $13,000; TYPEWRITER, MANDOLIN, VIOLIO, tenor GUITAR, ELECTRIC BROILER, CARPET SWEEPER, WAFFLE IRON. Duart PERMANENT WAVE MACHINE. OS 6-6449. A

KAISER, 1947 4-door, $100. E. J. McGOVERN, OS 5-7414. A

CONVERTED GARAGE, furnished, on 80'x140' lot, Alondra Park area. $6500. OS 6-3319. A

MOTOR SCOOTER, Cushman, $75. R. E. SAMUELSON, GR 7-6376. A

SOFA AND CHAIRS; mahogany COFFEE TABLE, tier LAMP TABLE, sell part or all for $45. FR 9-1309. A

OUTBOARD MOTOR, 1953 Scott-Atwater, 16 h.p., $205; 14' Glenwood SKI BOAT, trailer, 16 h.p. Scott-Atwater motor with controls, $675. JAMES HAIZLIP, OS 6-3319. A

GAS RANGE, $25; Servel REFRIGERATOR, $25; 1941 models. OR 1-3776. A

ENGINE, 85 h.p., V-8, complete marine conversion, $75. L. W. SMITH, FR 4-2759. A

WASHER, G.E. wringer type, automatic pump, $45. V. L. FUQUA, FR 4-7870.

METAL SHAPER, 1/3 h.p. motor, cast iron stand, $185. ELDON WORMLEY, OR 2-9347. A

REFRIGERATOR, Kelvinator, 9 cu. ft., $30; wheelbarrow PLANTER, $5.75; 2 folding lawn BED CHAIRS, $7.50 each; BINOCULARS, $6. OR 4-4032. A

BEDROOM SET, maple, $150; DINING ROOM SET, wrought iron, china cabinet, $75; COUCH and ROCKER, Provincial, $50; misc. SMALL ITEMS. DA 4-4831.

REFRIGERATOR, Servel, make offer. E. M. CAPRINE, EA 2-2166. A

LUGGAGE CARRIERS, car top, covers, 1 never used, $15 and $7.50; CABIN CRUISER, 16' inboard, trailer, $1250. FR 4-2190.

VACUUM CLEANER, Kenmaid, used once $135; DINETTE SET, 6-chair, $75; Admiral REFRIGERATOR, 3 years old, $125. OS 6-6164, 6-8 p.m. only. A

SIGNAL GENERATOR, never used, Model 89, $48. LExington 6-6251, after 11 a.m. A

BOAT 16', glassed, remote control, 25 h/p engine, trailer included, $750. FR 2-7037. A

NASH 1941 2 dr., $75 or best offer. A MADEOD, VE. 8-6890. A

TABLES blonde, glass topped, coffee; corner; 2 end; 2 ceramic based LAMPS, shades, $50. PAUL W. GOFF, JR., FR 2-4282. A

BOAT, 12' fiberglass Wizard, extras, $200. LOUISE CONKLIN, FR 2-4183. A

WASHING MACHINE, Universal wringer type, $20. J. L. THURMOND, AX 1-0483 after 5 p.m. A

BIKE, Boy's 26" Schwinn. $15. BESS PHILLIPS, EA 2-2657. A

BUICK, 1954 hard top convertible, $1800. MINNIE LOTHRINGER, Box 2213. A

KITCHEN SET, Howell chrome yellow, chairs, $20; CLUB CHAIR, Kroehler, green frieze English, matching ottoman, $25. OS 5-2331. A

HILLMAN CONVERTIBLE, 1953, $800; TAYLOR TOT, $5; folding BABY BUGGY, $3; girl's BIKE, $8; DOG HOUSE, $2; walnut RECORD CABINET, $5. Maigo Transistor HEARING AID, $85. GR 2-6621. A

DINETTE SET, yellow chrome, 4 chairs, $25. I. J. MOSBRUCKER, FR 2-4082. A

BED DIVAN and LOUNGE CHAIR, $65, various LIVING ROOM LAMPS, TABLES, $2 to $5 each. OS 6-6074. A

RUGS, 2, forest green, 16'x9' & 9'x8', $60 with pads. FR 5-8221.

FOR SALE

RIFLE, Savage .22 scope, extra clip, $20. ROY SCHNEIDER, PL 8-8812. A

BICYCLE, girl's, 26", $14. D. N. ODDY, OS 5-6473. A

GAS RANGE, O'Keefe and Merritt deluxe, 3 yrs. old, $150. DOLORES BOWER, OS. 5-5961. A

PORTABLE PHONOGRAPH, R.C.A., 45 only, $25. RUTH WALLACE, FR 9-8074, after 4 p.m. A

MOTORCYCLE, 1948 BSA, 250cc. $190, consider monthly payments. W. L. LIBERTY, LAmbert 5-6027. A

MOTORCYCLE, 1950 T-bird, extra parts, $375. A. E. ANDERSON, OS 6-4920. A

TRIPLEX, 2-bedrooms each, Manhattan Beach near stores, beach, 3 garages, 2 sun decks built in 1952, $5000 dwn. FR 5-4118. A

AUTOMATIC WASHER, Kelvinator, $60. N. M. SCHILZ. FR 4-7432. A

COMMUNICATION RECEIVER, Hallicrafters SX-71, .54 to 35 mcs., 6-meter band, $125. GENE SHADFORD. OR 4-5196. A

SLIDE RULE, Versilog, leather case, book of instructions, $25. NEIL AIKIN. OR 4-0966. A

KODAK 828 Pony, case and accessories, $30 or offer. HELEN MICHAELS. FR 5-5096. A

CAMERA, automatic Rolleiflex, F/3.5 Tessar, $75. JOHN MIYATA, AN 3-8534.

STOVE, 1 year old, double oven Kelvinator electric, $125, $20 dn. N. K. YOUNG, FA 8-8903. A

PIANO, medium size upright, $95; Dunphyfe DINETTE SET, 6 chairs, $35. TO 3-5196. A

FORD 1951 Country Squire 8 passenger Station Wagon, E. M. SKINNER, DA 6-0378. A

PARACHUTE, 28' nylon civilian seat pack, carrying case, $29. CARBURETOR (4 barrel) & manifold, fits '50 to '53 Cadillac, $35. FR 9-5114. A

AUTOMATIC WASHER, Whirlpool, 10 lb. capacity 2½ yrs. old. $100. F. V. PALERMO, PL 5-4198. A

WANTED TO BUY

FREEZER, upright, home. Cash waiting. Must be bargain. FR 5-6114. B

SAXOPHONE, tenor, good condition, price must be right. J. CARLSON, NE 1-3432. B

RUGS or LINOLEUM, used, for mountain cabin, reasonable. R. J. DE FUSSI, OR 7-6629. B

SPINET PIANO, ebony or blonde finish. GORDON R. SCHNEIDERMAN, Box 2201.

CEDAR CHEST, used, condition of finish not important, reasonable. D. M. SANDERS, FR 5-4720. B

CHROME CHAIRS, dinette size. E. J. McGOVERN, OS 5-7414. B

TWIN STROLLER. JOHN O'LEARY, Box 2210. B

BOAT COMPASS, large; DIRECTION FINDER, for boat. Box 2206. B

SPORTSMAN TOP, used, for Willys pickup. REX RUSSELL, FR 4-6137. B

PISTOLS, Luger, 7.62 or 9mm., Navy models, Swiss or standard, with 4, 6, 8 or 10" barrels; Mauser RIFLES, mod. 98, pre-war preferred. ROBERT A. LO VECE, Box 2205. B

RUGS, 2, room sizes (any), and or runners, reasonable, with pads if possible. R. F. ACKERMAN, FR 9-8059. B

CHEST OF DRAWERS, T.V., BED FRAMES for Hollywood type beds. BESS PHILLIPS, EA. 2-2657. B

SHOTGUN, double barrel, 20 gauge, full and modified. Box 2212. B

VACUUM CLEANER, tank type. RAY BOARMAN, PL 5-0863. B

FOR TRADE

WRIST WATCH, ladies' diamond and ruby Helbros, cost $500, trade for spinet piano. FR 2-9051. C

CAMERA, Leica standard, F:3.5, to trade for practice piano. REX RUSSELL, FR 4-6137. C

LABOR, yard work, house repairs, trade for furniture camping equipment, tools. Available nights or week ends. DA 3-3869. C

WOODEN NICKELS trade for any obsolete transportation tokens (one for one) such as streetcar, bus, ferry, toll bridges, plank roads, inclined elevators, cable cars. Must be metal, celluloid or plastic tokens. Box 2214. C

FOR SALE OR TRADE

FISHING BOAT, 19', small cabin, Universal engine, bait box, life jackets. V. A. HODGE, DA 4-9661, at 8 p.m. M

WASHER, Bendix, 1946 model, bolt down type, $19.50 or trade for ventilating fan and motor, ⅛ h.p. or larger. EX 7-4761. M

FREEZER, 20 cu. ft. Ben Hur, 1952 chest type, trade for 12 or 14 cu. ft. upright model or sell reasonable. NE 8-2638.

REFRIGERATOR, Norge. $60, or trade for used automatic washing machine. DA 6-2124. M

DARKROOM EQUIPMENT, including Photocrat contact printer, print washer, accessories, sell individually, as a compete lot or accept reflex camera in trade. W. S. COOK. DA 6-2467, evenings and weekends. M

FOR SALE OR TRADE

Late model CAR RADIOS, Hudson, Buick, Cad., late Motorola; rebuilt 1941 CAD. ENGINE; 4 TIRES 8.20x16 4 ply, tubes; 2 Goodyear Eagle Racing, tubes, 5.00x16, 4 ply; 2 Cessna airplane 8.50x10 4 ply, tubes, wheels, bearings; CONVERTIBLE TOP (heavy duty. Fits 1939 Buick, Olds or Cad; 30-40 Winchester RIFLE (long barrel) 1895 model. RIFLE SCOPE, Weaver K-V, Weaver quick detachable side mount. OS 6-1696. M

PIANO, upright, mahogany, $50 or trade for tank type vacuum cleaner. RAY BOARMAN, PL 5-0863. M

FREE (To be given away)

KITTENS; 3 year old AIREDALE to good homes. FR 2-9051. D

RENTALS OFFERED

HOUSE, small, 1-bedroom, unfurnished, in rear, suitable for 2, Inglewood, $70 month. OR 4-4032. E

APARTMENT, Crestline, day, week or month, sleeps up to 10. Box 2208 or Crestline 2219. E

FURNISHED ROOM, private home, near Northrop. DA 4-4410. E

SLEEPING ROOM, near Northrop, private entrance, $9; APARTMENT, 3 rooms, furnished, near Northrop, adults only, $75 per month. D. AMATANGELO, OS 5-5850. E

APARTMENT, 2-bedroom upstairs, unfurnished, children O.K., $82.50 month. R. E. SAMUELSON. GR 7-6376. E

APARTMENT, unfurnished, water paid, garage, near schools, shopping, El Segundo, $60 month. E. M. CAPRINE, EA 2-0890. E

COTTAGE, new stucco, in rear, 2 bedrooms, furnished, utilities paid, children considered, $85 month. PL 1-8170. E

PRIVATE ROOM, outside entrance and semi-private bath, near Plant 1, $8 week. H. R. STANLEY, OS 5-1450. E

HOUSE, 2-bedroom, Hawthorne, $85 month. MARTIN S. ALLISON, KE 3-4076. E

APARTMENT, deluxe, 1-bedroom, unfurnished, garage, laundromat, North Inglewood $70. OR 2-3169. E

APARTMENT, private, furnished, garage, adults only, no pets, $65, water paid. H. A. EDINGER, PL 6-6174. E

APARTMENT, 1 bedroom furnished, no children or pets, within 1 mile of Northrop, $75 month. R. G. ECKLES, OR 1-5046. E

RENTALS WANTED

HOUSE, unfurnished, 3 or more bedrooms, 15 minutes from Northrop, garage, yard, adults. OR 4-4447 after 5. F

CHILD CARE OFFERED

CHILD CARE, ages 3 to 10 years, fenced play yard, near school, days or nights, hot lunches, naps if desired. OS 5-7993. G

CHILD CARE, days, my home, will give hot lunch, any age over 1 year. D. H. DAVIS, PL 6-0015. G

CHILD CARE, days or nights, licensed, near school, play yard, hot lunches, naps if desired. OS 6-6566. G

LOST

GOLD HEART, vicinity of Plant III parking lot, sentimental value, lost Friday, 6-15-56. Box 2202. J

FOUND

SUN GLASSES, ladies', in cafeteria during 2nd lunch period, Wed., June 20. Box 2211. K

PERSONALS

AIR COOLER, want to rent, for car, from July 14 to Aug. 4. PEARL HARDACRE, OS 5-3423. L

☆

Buy Bonds Today

☆

ALL AMERICAN—. Bill Olsson, Northrop shipping inspector is official choice for member of All-American Volleyball team—see story below. Note jump—that net is 8 feet high! Bill is called volleyball's hardest hitter.

Norcrafter Bill Olsson Is Top Olympic Volley Man

When high-ranking officials of the U.S. Volleyball Association drew up the roster of All-American players, heading the list was Bill Olsson, Northrop shipping inspector.

Bill, who can hit a volleyball as hard as any man alive, was outstanding spiker on the Hollywood YMCA Stars team when they captured the 1956 National Volleyball championship in May.

Now Bill is looking toward Paris.

This summer a USA men's and women's team will go to Europe to compete in the World's Volleyball Championship to be conducted by the International Volleyball Federation. Twenty-nine nations will compete—including Russia.

While the U.S. Volleyball Association is a member of the Olympic Committee, volleyball is not officially in the Olympic Games in Melbourne due to lack of participation by many of the smaller countries.

Since volleyball is not on the Game list—the Volleyball Association cannot participate in the Olympic fund.

So Bill and his team-mates are trying to raise the $1500 per man needed to make the European jaunt possible.

The sport which has until recently been relegated to the beach in the U.S. is extremely popular with fans in Europe—it was the first sports event to be sold out in the Pan-American games last year.

If they do make the Paris trek—it is certain that the All Americans will give the other teams something to think about—especially when they get a look at Olsson's high jump. He jumps so high he gets his waist above the top of the net—and the net is eight feet high!

Greek Theatre---Hollywood Bowl Discounts at PA&S

By special arrangement, the Personnel Activities office has made available to Norcrafters discount exchange certificates to the Hollywood Bowl and the Greek Theatre.

Some of the outstanding summer entertainment programs offered during the Hollywood Bowl season include performances by violinist Zino Francescatti, contralto Marian Anderson, Cole Porter Night with David Rose, Dan Dailey and Patricia Morrison.

In August the programs include Light Opera Night with Carmen Dragon, Dorothy Kirsten, and MGM star Oreste, and performances by Alfred Wallenstein, Bruno Walter, David Rose and Leopold Stokowski.

The Greek Theatre summer program features Harry Belafonte in Sing, Man, Sing, the Ballet Russe de Monte Carlo, Sigmund Romberg's light opera The Student Prince, and the Victor Herbert operetta The Red Mill.

Certificates are good any night.

Norcrafters are also reminded that the special Northrop Family Day ticket order forms for Cinerama are still available in the Plants I and III Personnel Activities offices. These mail order forms should be completed and mailed to the Warner Hollywood Theatre no later than July 13.

SPORTS

The Northrop News

SOFTBALL LEAGUES HAVE AT

5XXX, 3862, 5970—OUT IN FRONT BIG HITTERS IN PACIFIC COAST

The inevitable sifting process which began when the 16 NRC day shift softball teams leaped into the season fracas last month is beginning to show results.

On top of the heap at this writing is American League team 5XXX, (4 wins, no loss, 1 tie), National League team 3862 (4 wins, 1 loss), and Pacific Coast League team 5970 (4 wins, no loss).

League standings are as follows:

AMERICAN

	W	L	T
5XXX	4	0	1
5300	3	2	....
El Seg.	2	3	....
5340	0	4	1

NATIONAL

	W	L	T
3862	4	1	....
5620	3	1	1
5622	3	2	....
3543	2	2	1
3812	1	4	....
Davidsons	1	4	....

PACIFIC COAST

	W	L	T
5970	4	0	....
3350	3	1	....
3710	2	2	....
Mariposa	2	2	....
3460	2	3	....
9370	0	5	....

Hardest hitters in the three leagues seem to be centered in the Pacific Coast league. Top batman is Chuck Fuller who has contacted 9 times out of 11 times up for an average of 818. Fellow PCer Bill Spencer has a 9 out of 14 for a 642.

First two leading hitters in the National League are Larry Linthicum who batted 8 out of 13 for a 615 average and Jerry Hudspeth with 8 out of 15 for a 533.

In the pitchers league, American players Don Bevens and Jack Gibilisco topped their league with 12 to 5 for 416 and 15 to 6 for 400 respectively.

SURF WALTONS THINK THEIR WAY IS BETTER

Everybody has their own ideas about their choice of the best "ole fishing hole". Some folks prefer the mountain stream variety but there is an ever growing trend toward the saltier sport.

Surf fishermen may be found at almost any hour, any day during the year casting their lines toward the big ones that feed near the beaches. NRC Surf Fishing club members are no exception.

These Norcrafters are so enthused about their hobby that they are now inviting newcomers to the sport to come out for instruction in surf casting, leader tying, and pointers on the fine art of surf fishing.

In addition to the regular fishing derby awards and monthly trophies, the Club offers a novice trophy for the member with the best "beginner's luck".

Club meetings are held the first Tuesday of every month and all Norcrafters are invited. "If you miss the meeting, says Comish Ed Rodish, watch for notice of the next field meet and join us then."

STATE F&G MAN TO QUESTION—ANSWER LAWS

Important drawing card for the next meeting of the NRC Gun Club will be a representative of the California State Fish and Game Commission who will be the answer man in a question and answer session on the new Fish and Game laws.

The meeting will be held on July 17 at 7:30 p.m. in the NRC Clubhouse.

All Norcrafters are invited to attend this meeting and are also invited to submit questions on Fish and Game laws and rulings for answer at this time.

NRC GOLFERS TO CHAMPIONSHIP JULY 22 AND 29

When the last divot has been replaced and the scores are tallied—the winner will be Northrop champ.

The NRC Open—Hawthorne facility golf championship—has been scheduled for July 22 and 29. It will be a 36 hole trial at the Alondra Golf Course.

Deadline for entries is July 13. Entry blanks are available in Plants 1 and III Personnel Activities offices.

Entry fee is $5.50. NRC trophies will be awarded winners. All Norcrafter golfers are invited to participate.

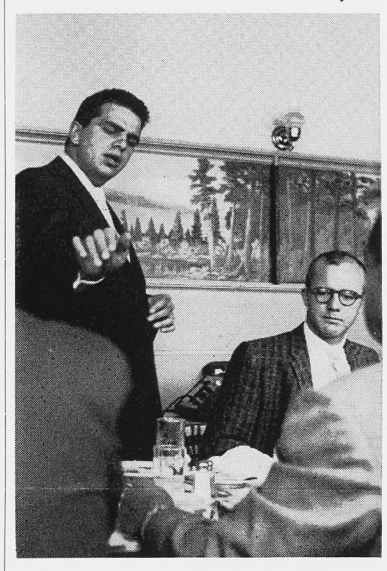
Ken Davis Top TMer--Two Awards

Top banana at the recent night shift Toastmaster's Club 1398 meeting was Ken Davis, TM stalwart.

Ken stepped proudly forward for two very special Toastmaster awards on the occasion. First time up was to accept the award for Best Speaker of the Year.

The next time around came when Ken and fellow TMer Bob Kubach were presented with the official Toastmaster International Certificates of Completion.

These certificates portray many hours of hard work and study in the public speaking field and indicate that the recipient is out of the amateur speaker class.



BEST—. Ken Davis, TM Best Speaker of Year makes point. Bill Teller is on right.

The next step for Ken and Bob is the big one. Completion of the next phase in Toastmastering—known as "beyond basic"—has been termed by educators as equivalent to two years of college study. Several Norcrafter toastmasters have started to work toward this goal, according to TM president Sam Grutsis.

At the same meeting, Toastmaster Bob Hannum received the annual TM award for the Most Improved Speaker of the Year.

Special guest at the session was Harry Clark, general supervisor, Personnel Activities and Services.

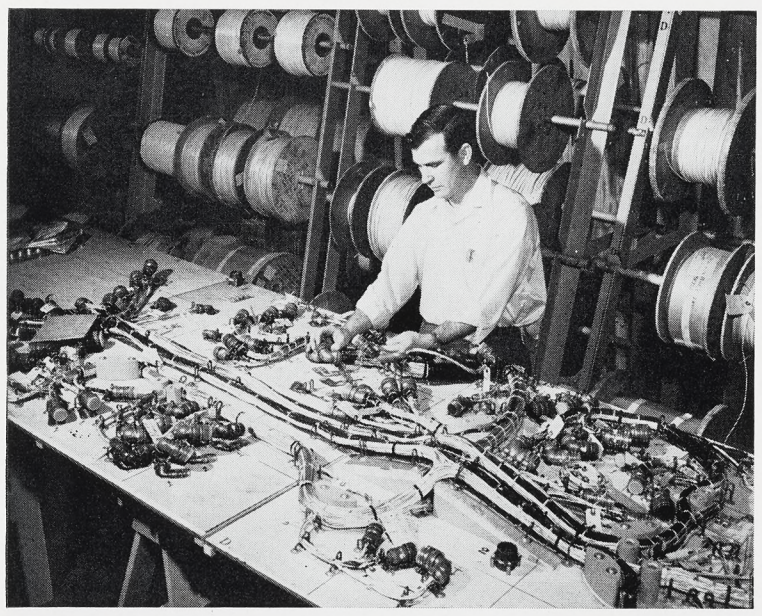
Water's Fine!

WELCOME—. Opening day of NRC Swimming season at Leuzinger High School pool last month drew large crowd of adults on Wednesday—even larger crowds on Friday, family night. Pool opens Wednesday, Friday, at 4:30 p.m. Children with adults are welcome every Friday.

PHOTO FEATURE:

Northrop News Pictorial

NEW JIG BOARD developed in Production Mock-up and Quick-Fix (5515) for use in electrical sub-assembly. Leadman Del Creamer checks placement of plug; note photographic section showing on board. Entire board is one huge photograph of electrical harness; operator follows picture in assembly. Reliability is critical factor.

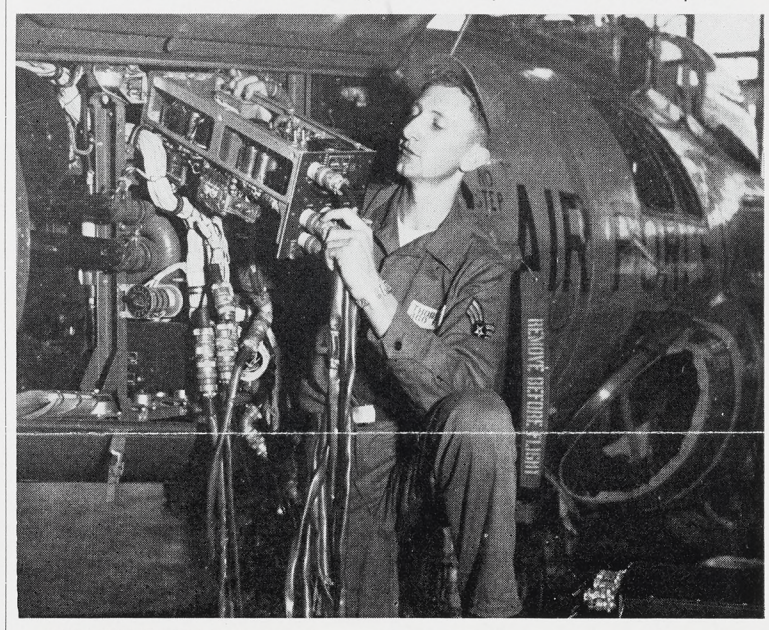


One Picture Is Worth - - -

UNDERSIDE OF BOARD is wired to make possible the testing of the assembly even before it goes into ship. Backwiring the panel: George Marinello, Don Hoff, and Al Beardsley, all of Department 5515. After assembly is installed in aircraft, it is tested again to prove complex circuitry.

CADC Issues Top Honors For Scorpion Men

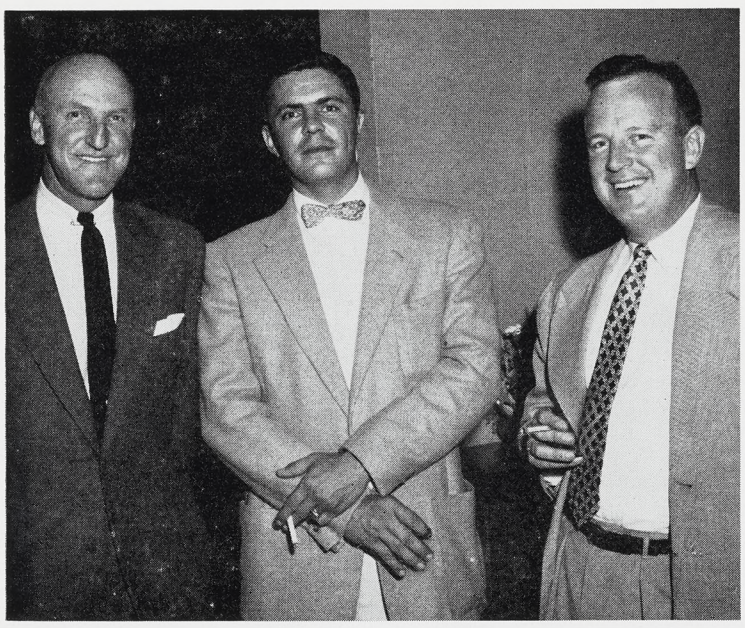
AIRMAN OF THE MONTH—for April. Sergeant Charlie W. Merritt, 465 FIS, Griffis Air Force Base, New York, was picked by CADC for April honors. Merritt—"worked many hours extra without direction or expectation of reward—used borrowed tools—aided squadron to maintain high air-hour average for Scorpions in spite of handicaps".



CONTINENTAL Air Defense Command named A/1C J. H. Thoben—460 FIS, Portland International Airport—as Airman of the Month for March. Thoben is assistant flight chief of "D" flight in air electronics section. The citation: exemplary ability—aid in establishing Moody rocketry training records—combat readiness. Honors include Scorpion model, jet ride, others. (Photos: Ent Air Force Base.)

Happy Birthday to - - - -

Florida MC Leaders



NEW VICE-PRESIDENT of Management Club at Northrop MTF is G. R. Flournoy, who was installed in office, with his fellow officers, at a recent installation banquet held at Rockledge Country Club. With Flournoy, who is at left in picture, are J. W. Oed, new treasurer, and F. M. Keenan, secretary. Absent from picture is A. J. Behl, elected MC, sergeant-at-arms. Club has active schedule.

FOXIE AND FRIENDS—. Man behind the cake is Adelbert Fox who had happy surprise when pals celebrated birthday with break-time cake, coffee. Department 5503 Fabrication Inspection friends are, front row, left: Yvonne Roy, Margaret Lopez, Foxie, Dorothy Patterson, Ann Mallory, Albert Gadbois. Back: Marie Louise Sauer, Wally Davis, Lorene Stettler, Bernard Barton, Rosann Wulzen, Hugh Fogle, Otis Hobbs, Glenn Hilquist, Robert Lawrence, John Kelley, and Gilbert Sepulveda. Happy day, this.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, July 18, 1956

Air Materiel Command Team Studies Weapon Reliability

MILITARY NATION-WIDE FOR PROGRAM

A two-and-one-half-day conference between a top level Air Force team and Northrop representatives last week again focused attention on the importance of reliability in the company's program.

The AF team, headed by Colonel C. F. Damberg, chief of Aircraft Division, Directorate of Procurement and Production, Air Materiel Command, stopped at Northrop to discuss the Air Force's nation-wide emphasis on reliability.

Taken in tow by reps of Engineering, Manufacturing, and Quality Control, the AF personnel reviewed Northrop procedures, plans, and policies, with particular attention directed to the reliability factor of the Snark missile program. Conclusions reached from the discussions were expected to prove of mutual benefit to the participants.

"We plan to conduct a continuing evaluation of all factors affecting XSM-62 reliability," Assistant Chief Engineer Roy P. Jackson stated in opening the meetings, "and take whatever additional measures, over and above those now planned, that are found to be necessary to provide a reliable weapon to the Air Force.

"We are keenly aware," Jackson continued, "that the operational success of a missile weapons system in the field can be measured in direct relationship to its reliability."

Many of the company's plans to achieve that end — both currently and in the future — were contained in a brochure prepared for presentation to the team.

Jackson and Chet Dunn, aided by Mitch Dazey and Bill Cox, represented Engineering at the conference. R. S. "Bob" Catlin participated for Quality Control, and J. J. Malneritch for Manufacturing. Lieutenant Colonel C. W. Tennant, Air Force plant representative at Northrop, attended with other personnel from that office.

The team headed by Colonel Damberg was visiting various Air Force contractors across the country to discuss the same program, indicating deep AF interest.

VIP VISIT

FAMED General James H. Doolittle, now chairman of Scientific Advisory Board, Hq. USAF, was among research and development study team visiting Northrop last week. In photo: Dr. C. D. Perkins, AF Chief Scientist, appointee; Vice-president Edgar Schmued; Lt. Col. R. A. Trennert, LA Development Field Office; General Doolittle; Vice-president John R. Alison.

NORTHROP projects and developments were discussed during meeting by Chief Engineer Dr. William F. Ballhaus, shown here conversing with Brig. Gen. D. R. Ostrander, assistant, guided missile systems, ARDC.

PRODUCT DISPLAY was shown visiting group. Going by one of displays are: Vice-president and General Manager Robert R. Miller; Maj. Gen. Ralph P. Swofford, Office of The Director of Research and Development, Hq. USAF; Dr. Perkins; Bud Mahurin, Military Relations; General Doolittle; and Vice-presidents John R. Alison and Edgar Schmued.

AID Congratulations

TO ALL NORCRAFTERS:

On 31 July 1956, the AID and NOR-AID program will have completed its first year at Northrop Aircraft, Inc. It has been a successful year, and it is gratifying to know that so many Norcrafters have participated by payroll deduction in assisting the many charities in their health, welfare, educational and research programs.

Grateful, too, are the many Norcrafters who were the recipients of NOR-AID grants made possible by your contributions to AID and NOR-AID.

Both as individuals and as an organization, we recognize our responsibility as good citizens to support our many local charities. For this reason, a formula has been created with the AID organization that will ensure the distribution of our contributions to the charities within the towns and communities where our personnel reside.

Our 1956-1957 AID and NOR-AID "refresher" campaign will start on 30 July 1956 and continue through 3 August 1956.

I am sure we will all wish to continue our support of this worthy humanitarian program.

WHITLEY C. COLLINS
President

Falcon First Air-Air Kill by H Scorpion

First air-to-air kill by the new Hughes Falcon missile has been racked up by a Scorpion H.

Word from Air Proving Ground Command, Eglin Air Force Base, Florida, states—:

"An F-89H Scorpion jet interceptor attacked and destroyed an unmanned QB-17 drone in a practice mission over the Air Proving Ground Command's water ranges, it was announced by Major General Robert W. Burns, APGC commander.

"The drone kill was made with a GAR-1 Falcon guided air-to-air missile.

"This is the first time the missile has been employed to destroy a target ship in a simulated air defense environment," the Air Force stated.

The QB-17 drone, flown by remote control, represented a hostile bomber. It was picked up by radar and the Scorpion armed with Falcon missiles was dispatched to intercept it. Lieutenant Colonel Louis E. Andre, Jr., from the 3241st Test Group (Interceptor) of APGC's Air Force Operational Test Center, and his radar observer, Squadron Leader George T. G. Richards, from the Royal Air Force, were credited with the kill.

Walter Kinney, Northrop tech rep at Eglin, praised the Air Force effort, saying:

"I would like to make some personal comments about the high degree of cooperation displayed by all concerned in making the

(See SCORPION H, Page 3)

Luckman to Address MC Next Meet

Charles Luckman, Pereira and Luckman, designer of Northrop's new buildings (see steel photo and Aireporter story, this issue) will address the Northrop Management Club next meeting.

The meeting will take place August 3 at the Rodger Young Auditorium, 936 W. Washington Boulevard. Time—6:30 p.m.

Luckman, at the age of 43, was president of the Pepsodent Company. At 46 he was president of Lever Brothers. He resigned this position to form his present Los Angeles company.

He wears the key of Tau Beta

(See LUCKMAN, Page 3)

Towers For Science

(See Aireporter Page 2)

"Working with Northrop" Manual Issued this Week

"Working With Northrop," Norcrafter personnel manual, was issued this week in new dress and new concept.

Industrial Relations Director John B. Clark stated that the manual is now being issued to all personnel to replace the older manual now out of date.

Distribution will take place through department clerks. Departments will receive a copy each for all members.

Norcrafters should read the manual thoroughly—from cover to cover—because it details company-employee rules and outlines all particulars on employee conduct and procedures in the plants.

STEEL ETCHING—. Hawthorne horizon changes daily as steel framework for new Northrop engineering building climbs skyward. Here giant crane sets girder free after having placed it meticulously in its appointed place. Workman, 90 feet high, still holds sling by which girder was lifted. Another workman, right, attends to fastenings.

TOWERS FOR SCIENCE

New Skyline Marks Northrop Field

Steel on the skyline means one thing to Americans—progress.

As the structures climb upward and the men in hard hats weave their webbing of I-beams and brackets, Mr. and Mrs. America have a good satisfied feeling. For this is America.

There is steel on the skyline at Northrop. Giant cranes have hoisted it. Men have fastened

By AIREPORTER

it together — from patternless metal to a definite outline of rooms and walls.

The Engineering office tower stands out most because it is the tallest—six stories—90 feet high.

Aireporter talked to Ed Petoskey—Facilities Planning head—who runs the program for Northrop. The interview took place at 7:30 a.m., because that is when Ed gets to work and it's still quiet in Facilities Planning offices. Ed is a big man—a 13-year Norcrafter—over two hundred pounds, and active. It wouldn't surprise you to see him atop the highest I-beam on the project consulting, checking specifications.

His Plant One office walls are papered with charts, drawings.

Ask him a question. He has an immediate answer.

How many tons of steel will the whole show take?

Twenty-five hundred tons!

How deep did the contractors have to go to find solid footing?

As much as twenty feet. And here is a story within a story. Soil in the Centinela Valley is not like that of Manhattan—underlain by living granite. We have dirt here, and, way down, sediments — sandstones, shales. We have what skyscraper builders call 2300 psf soil.

This soil, admirable for many purposes but lacking in skyscraper requirements, called for special and ingenious footings. Underpinnings must be solid. Leaning Towers of Pisa are fine as curiosities, but not so good to design aircraft in.

Footings for the new Northrop buildings are of the drilled pier type that gain foundation strength from earth shear resistance on the sides. This shear resistance, plus the direct support from the end of the pier that rests on the bottom of the hole provides the necessary bearing. Depending on the weight of the particular part of the building supported, the piers are unit grouped in numbers up to nine.

Elevators?

Yes—there will be two self-operated elevators in the tower.

Floors?

The latest in asphalt tile.

Colors?

Too early to tell what the colors will be, except that the exterior will be black and white.

Windows?

Definitely! With the exception of work areas that require controlled lighting, there will be plenty of windows. Pereira and Luckman, architects of the new Northrop buildings, are of the window school of industrial designers. Ratio of glass to solid wall is high—one to two and a half.

Schedules?

Good—real good.

Engineering offices are 10 per cent ahead.

Cafeteria is nine per cent ahead as of now.

Engineering test building is six per cent behind—now catching up and will be completed on time.

Utilities are four per cent behind—held up by work on the standby fire water reservoir. Now catching up and will be ahead.

Wind tunnel is 14 per cent behind — due to a fire caused during welding operations, plus critical specifications for casting of the fan blades.

All steel required is on site with the exception of the cafeteria. A delay is anticipated here due to the strike.

About 8 a.m. Northrop Vice-president and General Manager R. R. "Bob" Miller dropped in to check progress and asked that a water color of the new buildings be taken to Plant Four to be part of the exhibit during General Doolittle's visit. Conversation developed on the five new projects that have joined the building program.

These projects are:

Relocation of the old low speed wind tunnel to Plant Three where it will be used by Boundary Layer projects.

Relocation of old Engineering test building to area south of wind tunnel, where the model shop will be located.

Complete rearrangement of the Process building at Plant Three to embrace area vacated by model shop. This will be an expansion of Materials and Processes and Quality Control Labs.

An aero thermal dynamics test laboratory addition to the new low speed wind tunnel.

Missile count down facilities—two buildings, a missile pre-flight lab and a missile pre-flight engine test cell.

The program is a vast one. It already has changed the area. It will mark Northrop Field from afar. It will become a point of reference through the years.

The Engineering office tower will be lit at night with flood lights. Transcontinental pilots will welcome its sight after the long haul from New York or Washington. It will be a science center. Wondrous things will emerge from it — technological advances for all mankind.

Ed Petoskey and the architects and the contractors watch their schedules like hawks. Those buildings are going up. People want to move in and go to work.

The Aireporter interview had taken an hour. It was 8:30 now. Facilities Planning offices were no longer quiet. Phones were ringing. Buzzers were buzzing. Aireporter was no longer the only one asking questions. Decisions as to the mechanics of building and steel were being staccatoed. Reports were rendered to office after office in few but positive words.

If the Northrop building project had remained dormant for the few night hours just passed, it was on the way with the rising sun.

It was on the way with a rush.

Northrop News
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A. V. CLINE, Director
CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)
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News office phones—2456, 2457. Outside lines—OR 8-9111, OS 5-4611.

One Reason

WHO WOULDN'T HELP—? Little David Hart is one of many like him who have been assisted by Norcrafter contributions through the Associated In-Group Donors program. David is shown here with volunteer barber Carl Cerney, getting his first butch haircut. See story on AID.

"Going My Way" forms are available from department clerks at all Northrop facilities, from PA offices, the Personnel department, Industrial Relations offices, lobbies, and the Northrop News Office.

Deadline is Wednesday noon before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 5)
SOUTH & BELLFLOWER, Lakewood. (Three riders wanted to any Plant.) EDITH MANTEUFEL (5224-15483, Ext. 1259), TO 6-2553. 12-5

7:30 a.m. — 4:15 p.m.

(Zone 5)
PALO VERDE & STEARNS, Long Beach. (Will take riders from Los Altos area.) JUD LA FLASH (3148-3883, Ext. 744, 745, 746), HE 4-6921. 13-5

(Zone 9)
LINDA & 101 HIGHWAY, Torrance. (Route: 101 to Linda Dr., Torrance Blvd. to Crenshaw.) LEONARD KISSEL (3410-38195, Ext. 2356), FR 5-2493. 13-9

7:30 a.m. — 5:15 p.m.

(Zone 4)
ROSEMEAD & WASHINGTON BLVD., Whittier. (Route via Rosemead, Imperial, Crenshaw/Imperial, Alameda, El Segundo.) DON MYERS (1810-43969, Ext 2024) OX 2-1550. 14-4

(Zone 5)
LINCOLN (CARSON) & MAGNOLIA or Lincoln & Gilbert, Anaheim. (Would also consider Norcrafters in Lakewood, Buena Park, Garden Grove, Artesia, North Long Beach or Bixby Knolls; car pool desired.) H. A. STERN (5421-43660, Ext. 2342, 2343 or 2344), JA 7-3871. 14-5

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)
PICO & WESTERN, Los Angeles. OLIVER C. HARRIS (5583-23047, Ext. 2097). 2-1

(Zone 9)
PRAIRIE & 162ND, Lawndale. BETTE GIDEONS (5351-43342, Ext. 541), FR 9-0095. 2-9

(Zone 13)
MANCHESTER & FREEMAN or ARBOR VITAE & FREEMAN, Inglewood. GAYLOR L. O'LEPEY (5355-33594, Ext. 1575, 481), OR 1-9633 2-13

IMPERIAL & PRAIRIE, Inglewood 2. HELEN K. ESCHBACH (5621-34711, Ext. 2649), OR 2-7023. 2-13

(Zone 14)
LA BREA & COLISEUM OR RODEO, Los Angeles. (La Brea south to Plant 1.) M. B. YOUNG (5224-15390, Ext. 1259), AX 2-7889. 2-14

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 2)
VERMONT & W. 80TH, Los Angeles 44. VIOLET GALIOTO (5140-36585, Ext. 2667, 2668, 2669) PL 2-5732. 3-2

(Zone 3)
LONG BEACH (PACIFIC) BLVD. & FLORENCE, Huntington Park. (Car pool considered.) ROBERT BARCLAY (3140-44531, Ext. 434). 3-3

(Zone 4)
FIGUEROA & 120TH, Los Angeles 61. DEE RIVELLO (1421-12239, Ext. 691), PL 6-3818. 3-4

(Zone 13)
SEPULVEDA & SANTA MONICA BLVDS., West Los Angeles 25. (Car pool considered.) R. KING (3410-33809, Ext. 400), GR 7-1937. 3-13

BUCKLER & FAIRVIEW, Inglewood 3. FERN C. MUTH (Air Force, Ext. 1921 or 1923), OR 1-5884. 3-13

7:30 a.m. — 5:15 p.m.

(Zone 5)
LINCOLN (CARSON) & MAGNOLIA or Lincoln & Gilbert, Anaheim. (Would also consider Norcrafters in Lakewood, Buena Park, Garden Grove, Artesia, North Long Beach or Bixby Knolls; car pool desired.) H. A. STERN (5421-43660, Ext. 2342, 2343 or 2344), JA 7-3871. 4-5

4:45 p.m. — 1:15 a.m.

(Zone 4)
FIGUEROA OR BROADWAY & WEST 119TH, Los Angeles 61. GRACE MOORE (5621-24091, Ext. 2208), PL 4-8467. 8-4

(Zone 10)
BERYL & MARIA or Diamond & Maria, Redondo Beach. DORCAS R. BARRETT (5445-39262, Ext. 1926), FR 2-8221.

(Zone 12)
EMERSON & MANCHESTER, Los Angeles 45. (Westchester vicinity near Manchester & Sepulveda.) VICTORIA PFAU (5351-43610, Ext. 541), OR 7-2646. 8-12

Miscellaneous — (Split Shift)

(Zone 5)
DOWNEY & SOUTH ST. or Downey & Del Monte, Lakewood. (Mariposa; hours: 6:45 a.m. to 3:30 p.m.) THOMAS L. REEVE (6325-25730, Ext. 1275), ME 0-1364. 10-5

Luckman—

(Continued from Page 1)

Pi—the nation's highest honorary engineering fraternity.

His designs include: Air Force Academy, Colorado Springs; Northrop Aircraft's engineering complex; Air Force bases in Spain; and the new Los Angeles International Airport.

From management side — George Gore, corporation counsel, will conduct the Company affairs-question and answer program.

Dinner will be ham steak or fish.

Scorpion H

(Continued from Page 1)

mission possible. Time was short — the drones were not to be available after the first — (July). Many overtime hours were put in—checking — coordinating this operation."

The Falcon, developed for the U. S. Air Force by Hughes Aircraft Company, is a rocket-propelled interceptor missile which is capable of guiding itself to a target. Designed to be launched from F-89H and F-102 interceptor planes, the Falcon weighs slightly over 100 pounds and measures nearly seven feet in length.

August Campaign Plan For AID and NOR-AID

The last day of July will end Northrop's first year as a participant in the Associated In-Group Donor's program.

The program has proven highly successful in all Northrop plants and facilities. Special compliment is paid Norcrafters for their participation by President Whitley C. Collins in his letter which appears on Page 1.

With the beginning of a new AID and NOR-AID year, a "booster" campaign is being conducted to provide Norcrafters with the opportunity to participate in the program if they are not already doing so, and to enable those who are already participating to redesignate their specific charities or to adjust their annual pledges.

Through the association and with the cooperation of AID, NOR-AID—Northrop's in-plant charity—was inaugurated. NOR-AID is supported solely by the generosity of Norcrafters. Its income is derived from designations to NOR-AID; and from a percentage of all the subscriptions that have not been designated to a specific charity.

Department clerk meetings started on Monday of this week and will continue through Friday. At these meetings all department clerks will be given a brief renewal course in mechanics of the AID and NOR-AID program and will be brought up-to-date on certain changes to become effective during the year.

Prime announcements to be heard by department clerks include the news that undesignated Norcrafter contributions which are distributed among the ten major AID causes will be divided from now on through the newly-created Northrop Formula. The Northrop Formula was set up with the cooperation of AID officials to ensure that Norcrafter moneys would be allocated to only those towns and communities in which Norcrafters reside.

It is also noted that designation forms—in which contributions are made to specific plant charities or causes—are valid for a period of only one year. Norcrafters desiring to designate for the first time or to redesignate contributions must complete new 1956-1957 designation forms.

AID Pledge Cards will be distributed to all personnel on July 26 and 27.

Norcrafters who signed for undesignated contributions last year and wish to continue the same deductions through the next year are not required to complete new cards. However, those who wish to increase their contributions and those who are not presently contributing, but desire to do so, should use the pledge card provided them.

Additional information on AID and NOR-AID will be available from all department clerks. Sign-up and designation cards should be completed and returned to department clerks during AID campaign week—July 30 through August 3.

Bankers at Edwards

BANKER'S HANDICAP TOURNEY—. Edwards facility winners in recent Palmdale-Edwards NRC Banker's Handicap golf tourney are pictured, left: John Birt, Louis Baker, Chuck Lee, Edwards NRC Golf comish; Mal Lowe, and Rodger Guilmette. Play was on the new Antelope Valley grass course. Winners took home NRC trophies pictured.

BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

Use regular Barter, Buy, Sell or Free Form 19-308 (10-53) available from stationery stockrooms, department clerks, Northrop News office, Personnel Activities, plant lobbies.

Ads will be run one time only. If you wish the ad repeated, please fill out another form and forward to the Northrop News Office, Department 1320, Zone 65.

Box numbers will be provided to Norcrafters who do not have home phones or who do not wish calls. Replies to box numbers are to be in writing. Box number replies will be forwarded by the News Office without delay.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday one week before publication.

FOR SALE

DEEP FRY, commercial, $25; UTILITY TABLE, white enamel, $5; DISHES; MISC. W. R. STEVENS, Box 2309. A

KITCHEN RANGE, Sears, full size, under 1 year old. PL 5-0786, after 4:30 p.m. A

BUICK, 1955 Century Riviera. R. N. OLIVER, FR 5-7487. A

FORD, 1935 coupe, $45. A. D. NOLAN, FR 7-2363. A

ELECTRIC RANGE, Woolwine, offer. B. SWEARINGER, NE 1-1761. A

FORD, 1951 Country Squire, 8-passenger station wagon. E. M. SKINNER, DA 6-0378. A

BUICK, 1941 club coupe, $60. J. M. GRIDER, OS 5-9085. A

COLLIE, female, tri-color, 2 years old, needs larger yard, $50. ROBERT BARCLAY, Box 2307. A

FORD PARTS, 1939 motor, transmission, frame, 4 wheels, $100; Choremaster gasoline POST HOLE DIGGER, $100; small heavy-duty TRICYCLE, $4.50. VE 7-4237. A

PACKARD, 1952, 4-door, Ultramatic. ELIZABETH DE LACY, FR 9-7137. A

CADILLAC, 1954, 62, 4-door, $3295. J. H. ROBNETT, WE 5-8798. A

REFRIGERATOR, Coldspot, $35. HARRY ALLEN, OS 6-8842. A

OLDSMOBILE, 1941 coupe, automatic shift, $75. Box 2305. A

FORD, '30 model A sedan, $75. G. F. MAHLER, OS 5-3581. A

WINDOWS AND FRAMES, two 3'x4', removed from new house, $5 each. JOHN WELSH, FR 5-7720. A

PUPS, Doberman Pinscher, AKC, 5 weeks old. RONALD STARK, PL 9-3207 or FR 5-1000. A

CAMPING TRAILER; woodworking BANDSAW; JIG-SAW, 24" throat; SHAPER; 5½" JOINTER-PLANER. MIKE, TO 9-8937. A

TRAILER, 1-wheel, 4'x4', all steel, hitches, $45. S. OKADA, RE 2-9259. A

TRAIN, American Flyer smoke and whistle freight, accessories, 4'x8' plywood board, $47.50. DA 6-5558. A

BOAT, 14' double, runabout, fiberglassed, 16 hp. motor, trailer, $600. H. W. ANDERSON, Box 2303. A

PACKARD, 1948 4-door, recent tune up, $175. W. W. WADDELL, WE 9-4968 after 5 p. m. A

BUICK, 1956 Century 4-door hard-top. OS 6-7390. A

BUICK, 1952 2-door hard-top Riviera, $750. JOHN DE JONG, AX 2-3307, after 5 p.m. A

BABY CRIB, springs, mattress, matching wardrobe, $25; LAWNMOWER, needs sharpening, $5. DA 4-6053. A

PIANO, upright, $85. MARY E. MAKIN, OS 6-7055. A

BUICK, 1954 Special Riviera hard-top, $1750. LEE C. TEETER, OR 2-9096. A

TOASTER, Proctor, hardly used, offer. S. DORTIGNAC, OS 6-6298. A

RANGE Western Holly, griddle, disappearing shelf, $65. M. P. BALS, FR 5-6773, after 5 p.m. A

HOUSE, large yard, 3-bedroom, $500 down, take over payments of $71.34. DA 3-3185. A

PATIO UMBRELLA, red and white plaid Nylon, $25. PL 6-6563, after 5 p. m.

FM TUNER, Heathkit, used 3 months, $25. C. RODRIGUEZ, TH 2-1527. A

HOUSE TRAILER, late 1955 Aljoa Sportsman, 23'. $1900. H. D. BROOKS, JR., Box 2302. A

BABY STROLLERS, 1 Taylor Tot, 1 Foldarola, $5 each; Singer portable SEWING MACHINE; Jackson TUBE CHECKER, $10. OR 1-0774. A

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

FOR SALE

GAS RANGE, $25. W. R. MOLIERE, OS 5-8540. A

REFRIGERATOR, Coldspot, 10 cu. ft., $50. ELAINE TOMPKINS, HO 2-4463.

FURNITURE, upholstered chair; upholstered chair and ottoman, cedar chest, coffee table, 2 3-way floor lamps; Kenmore wringer type washer, hospital bed, table, attached lamp. AX 2-8871.

BUICK, 1941 Special, cash or terms. DOLORES M. SLUSARZ. FR 9-7342. A

WASHING MACHINE, wringer type, $20; 30 volume set ENCYCLOPEDIA AMERICANA, $30; BUMPER JACK, $1.50; LAWNMOWER, $3.50. FR 9-9369. A

SPIDER MONKEY, blonde, female, 10 mos. old, had all shots, $30. ME 3-6394, after 5 p.m. A

LIVING ROOM SET, 2 pieces, Hide-A-Way bed, $90; DINING ROOM SET, French Provincial, 2 years old; AUTOMATIC WASHER, ABC, 3 yrs. old, $100. ME 0-2934. A

SERVING TRAY, black lacquer, Chinese design, $5; Melmac DINNERWARE, 16 pieces, $5; auto BUMPER JACK, $1.50; 1955 Buick STEERING WHEEL, $2; ANTIQUE DISHES. GR 7-1539. A

JEEP, Willys, military model, drawbar. TE 3-3968. A

STOVE, table top, white, Prosperity, $10. LESLIE MATTHIES, LA 5-1959. A

TRAILER, 1-wheel camper, new cover, $35. WAYNE LAVELL, OR 7-3817. A

FREEZER 18 cu. ft. Hibbard upright, $300. HARRY F. E. VEDEL, Box 2312. A

FORD, 1951 Victoria hard-top, $425. R. C. HAMILTON, JA 7-2352, Buena Park. A

DODGE, 1952 Coronet 4-door sedan, $550. Box 2311. A

DRESS, brown suede, size 12, snakeskin trim, cost $95, $15. TAMARA ANDREEVA, Box 2310. A

BUICK, 1954 special hard-top convertible, $1795, terms. MINNIE LOTHRINGER, FR 6-1367. A

NASH RAMBLER, 1956 Cross Country station wagon, $2500; OLDSMOBILE, 1955 Super 88 4-door. A. M. STEED, JR., EX 8-5228. A

BEDROOM SUITE, walnut, 5-piece, $50; 1942 OLDSMOBILE, Hydra-Matic, $65; RECORD CABINET, $4; 3-bedroom HOUSE, 4 years old, patio and bbq., rear living room, Norwalk, $14,950, to 1st, $5450, can be refinanced under FHA with $3000 down. TO 4-0868. A

TRIPLEX, 2 bedroom vacant partly furnished, block to La Tijera shopping center, unused frontage, $8000 down. OR 1-9069. A

KAISER, 1951 4-door, Darrin body, $200. WM. L. CONDIE, FR 9-4103. A

TABLE, four CHAIRS, $35. T. L. REEVE, ME 0-1364. A

ADDING MACHINE, R. C. ALLEN, 56-S, cost $140, $75. G. F. WATKINS, NE 5-6588 A

STUDEBAKER, 1948 convertible, new motor, $200. ARTHUR WEISS, EX 8-0500. A

CRIB, full size, mahogany hardwood, non-allergy, inner spring mattress, $35. MAX STERN, DA 4-6748. A

PLATE TRANSFORMER, 1-kw., 2000 each side center tap, $15. AX 1-2564. A

DOUBLE BED, orthopedic, box springs, $25. D. A. CLARKE. OS 5-2296. A

RECORD CHANGER, hifi, Collard model 54, GE cartridge, wood base, $30. FR 9-1771. A

BOILER, Steamaster, 3½ hp., 100 lb. pressure, $150; 2 stainless KETTLES, 60 and 80 gals., $25 each. DA 9-4065, evenings. A

POODLE, miniature, black, 6 weeks old, male, pedigree, $100. BETTY KINCY, FR 5-2401. A

CHEVROLET, 1931, $50. LORIN MITTS, DA 4-3051. A

TABLE, 4 CHAIRS, yellow chrome, $35. B. THOMAS, OS 6-0616. A

TACHOMETER, Sun electric, 7000 rpm., column or dash mount, $30; Ford tubular FRONT AXLE, spindles, springs, $12.50. LO 6-3441. A

MOTOR CRUISER, 40', sleeps 9, Chrysler Royal 140 hp. marine engine, $1600. DAVID GLABE, FR 5-0723. A

FURNITURE, living room, dining room and bedroom, floor lamp, coffee table, wrought iron dinette set, limed-oak bedroom set, all modern, take over payments of $31 per month. J. D. TUTTLE, DU 6-0571 or DU 2-0272, evenings. A

REFRIGERATOR, 9 cu. ft., Crosley Shelvador, $79. DA 9-7079. A

FOR SALE

SAW, Shopmaster, 7" blade, ¾ hp. motor, $65; ROTOBROIL, "400", $15; Kelvinator REFRIGERATOR, 9', $20; lawn WHEELBARROW, $5.75. OR 4-4032. A

DIVAN and ROCKER, $40; DINING ROOM SET, wrought iron, large china cabinet, $60; KITCHEN CABINET, $5; chrome DINETTE, yellow, $30. THOMAS YUEN, DA 4-4831. A

PONTIAC, 1953 super Catalina. L. V. LEMIRE, TO 7-0287. A

SADDLE, brown Western, double cinch, used 3 months, $65. THOMAS WILSON, OS 5-3497. A

CAR, 1951 deluxe 2-door. $225. OS 6-9641, before 3 p.m. A

KITCHEN SET, Howell, chrome, yellow chairs, $20; CLUB CHAIR, Kroehler, green frieze, English, matching ottoman, $25. OS 5-2331. A

HORSE, white gelding, woman's horse, $75; Sear's 24" JIG SAW, bench and motor, reasonable, offer considered. OS 6-6463, after 4:30 p.m. A

CHEVROLET, 1937 coupe. $50. OR 2-1282, after 5 p.m. A

DINING ROOM TABLE, walnut, 6 chairs, $35; Thermador ELECTRIC HEATER wired for 220 outlet. $50. R. D. MOOR, PL 1-8017. A

CHINCHILLAS, with equipment, $20 each, 2 for $35, herd of 22 animals with cages and equipment, $350. OS 6-4482. A

LINCOLN LIMOUSINE, 1939, overhauled, $150. TED KELLY. DI 3-2938. A

DRUM SET, Slingerland, $200; Elna Supermatic SEWING MACHINE, $200. FR 2-9051. A

HOUSE TRAILER, 14', sleeps 2, $160. M. STERN, DA 4-6748. A

CAMP STOVE, 3 burner, $9; DRESSMAKER'S FORM, adjustable, $8. H. DAWSON, FR 5-3894. A

SUIT, Boy's, size 12, grey tweed, $10; TV table, mahogany, $1; MISC. ITEMS, offer. DA 4-3968. A

GOLF CLUBS, bag, 3 Wilson woods, 7 Spalding irons, $50 complete; CAMERA, 35mm Welta, f:2.9 lens, $25. OR 4-5791. A

RADIATOR, gas-steam, $25; Royal TYPEWRITER, all caps, $8; Perspective DRAFTING MACHINE, $5; standard FILE DRAWER, $7; Estate gas RANGE, $40. PL 4-9637. A

PHOTO ENLARGER, Omega, 2¼"x3¼", 3½" Wollensak f:4.5 click stop lens, $115. JOSEPH F. ROGGY, Box 2315. A

GAS RANGE, 1953 Kenmore, 34"-four burner, $44.50. Broiler & storage space. JAckson 7-3871. A

BUICK convertible, 1953 Super, $1250 firm. C. W. BROOKS, DA. 9-3578. A

HILLMAN MINX, 1954 California hard-top $950; Coldspot REFRIGERATOR, $50. R. F. HUTTON. OS 5-6831. A

BICYCLE, boys 26" racer, J. C. Higgins, frame, tires O.K., needs new hand brake, $5. DA 9-5249. A

PUPS, Beagle, A.K.C. registered, whelped June 16, 1956. FR. 5-5171 after 5:00. A

HOUSE, 3-bedroom, rumpus room, tool shed, tennis court, fireplace, Hawthorne, $14,500. OS. 6-8118. A

BOAT COMPASS 4" Gimbal mounted free swing. R. L. GLADSON. NE. 7-7836.

CHEVROLET, 1935 Pickup, $175; WILLYS 1946 Army jeep, $595. VERLIN L. SEAMAN, OS. 6-6390. A

REFRIGERATOR, Crosley Shelvador, $80; ABC-O-Matic WASHER, $80. R. CONNELY, DA. 9-7079. A

HOUSE, Large 2-bedroom, w/w carpet, 44'x20' concrete court, 30'x20' patio, fenced. Cash to new F.H.A. loan, full price $12,950. OS. 5-2954 after 6:30 p.m. A

WANTED TO BUY

RECORD PLAYER, RCA 45 rpm.; Hoover VACUUM CLEANER, HAL PARRY, OR 1-0774. B

TAPE RECORDER, cheap and in working condition. JOE JENSEN, WH 2-0674, Lancaster. B

HOUSE, 2-bedroom, double garage, fenced, near Northrop, prefer older home, must be bargain. OS 5-9314. B

RADIO TRANSMITTER, 500 watt, AM, phone, bandswitching and VFO desired. D. P. ARMSTRONG. OR 7-4054. B

LARGE LOT, R-4 or C-1, possibly with old house on it, send price and description. Box 2313. B

AUTOMOBILE, before '53, must be good for 60 mile daily commute, pay cash. LESLIE MATTHIES, LA 5-1959, Fullerton. B

ELECTRIC DRILL, two amp. or heavier, about 1700 rpms., must be good condition, reasonable. R. W. HOMAN, FR 2-0509. B

FORD or CHEVROLET, 1956, take over payments, buy equity; FORD TRUCK, 48-52 F6 2-ton 2 speed, 8¼-20 tires, conventional cab with about 18' van. OS. 6-8003. B

BABY CARRIAGE. EDWARD W. COLLIN, DA. 4-3968. B

BANTAM CHICKENS, pair (hen & rooster). K. KLIER. DA 9-5646. B

MOTORCYCLE, 1951-2 BSA or Triumph twin. Unmodified, Cash for good buy. LAmbert 5-6027, after 6 p.m. B

FOR TRADE

FORD, 1956 Victoria, trade equity for older model, prefer 1951 or 1952. R. M. KING, OX 7-9309. C

MOTORCYCLE, Triumph 500 cc twin, trade for good Harley Davidson. M. W. ANGELL, Box 2316. C

FOR SALE OR TRADE

OUTBOARD MOTOR, 5 hp., $50 or trade for 2 or 3 hp. motor. JAMES G. BURKE, OR 1-1992. M

WASHER, Whirlpool, wringer type, trade for 2-wheel trailer, fair condition, $30. BERNARD MELTZER, DA 4-6053. M

FREEZER, 18.5', upright Sub-Zero, warranty still effective, $150, or trade for Ironrite mangle or good console sewing machine. OS 6-4622. M

TRAILER, 1954 Viking, 28', modern, '56 license, $1800, or trade for 17' or 18' vacation trailer as part. H. F. WILLIFORD, OR 1-6594. M

HILLMAN MINX, 1950 salon sedan, trade for 18' boat of equal value, consider equity in larger boat, cash. B. R. KUHN, TE 5-4118. M

MOTORCYCLE 1946 74" OH valve, take late model gas range or piano as part or full payment of $249. OR. 1-6070, 10 A.M. to 3 P.M.

DARKROOM EQUIPMENT, including Print Washer, Timers, Film Tank, scales, sell individually or as a complete lot for $30. Will accept camera equipment in trade. DA. 6-2467 evenings and weekends. M

FREEZER, 17.5 cu. ft. upright Jordan. Will sell or trade my equity for small radio, sewing machine, or $30 cash. JOHN W. GRAY. WEstminster 2-1326. M

AIRCRAFT HEATER Stewart-Warner South Wind 100,000 BTU. Has 1½ HP gas motor dolly mounted, $125 or trade for small 110 v. generator or 2-way boat radio. FR. 4-7296. M

FREE (To be given away)

TOP SOIL, D. SLUSARZ. FR 9-7342. A

TERRIER, mixed, wants good home, small, white, black spots, 6 months old, house broken. T. D. ODELL, PL 2-2655.

KITTEN, 12 weeks old. L. A. WILLIAMS, FA 8-4938. D

RENTALS OFFERED

APARTMENT, lower 2-bedroom, unfurnished, garage, near Century and Crenshaw Blvd., children O.K. $100. EX 6-6823 or EX 9-5587. E

GARAGE, car or storage, Lennox area, $8 month. E. L. WECKBAUGH, OR 1-6473. E

SLEEPING ROOM, man only, outside entrance, near Plant 1, $7 week. G. C. FULTON, OS 6-7104. E

HOUSE, 3 years old, 3 bedroom, den, 2-car garage, fenced yard, 6 miles from Northrop, $100 month. D. BROOKER, DA 9-5718. E

HOUSE, 1 bedroom, unfurnished, prefer working couple, Inglewood, $70 month. OR 4-4032, evenings. E

COTTAGE, new stucco, in rear, 2 bedrooms, furnished utilities paid, children considered, $85 month. PL 1-8170. E

PARKING SPACES, automobile, near plant, 1 or 2, $1 week or $4 month. H. R. STANLEY, OS. 5-6616. E

SLEEPING ROOM, man only, private bath and entrance, $8 week, near Prairie and 132nd St. OS. 5-6308. E

SHARE APARTMENT 6 large rooms, private bedroom, 2 working girls, share exp. Available Aug. 1. DU. 7-6690 after 6 p.m. E

RENTALS WANTED

HOUSE OR DUPLEX, 2 or 3 bedroom, unfurnished, fenced, near Elementary School, Hawthorne area preferred, pay to $85. A. S. BANKS, Box 2308. F

RENTALS WANTED

ROOM, with bath nearby, for one man, to use during weekdays only. LESLIE MATTHIES, LA 5-1959. (Fullerton). F

APARTMENT or HOUSE. 1-bedroom furnished w/garage, not over $60 mo., man alone. DA. 4-3493 (after 4 p.m.) F

CHILD CARE OFFERED

CHILD CARE, 2 or 3 children, day or night, enclosed back yard, infants to 8 years. OS 5-3864. G

CHILD CARE, responsible, intelligent woman, 6 years with Northrop in clerical capacity, will baby-sit 5 nights a week in exchange for room in Southwest area. Will furnish character references after interview. Box 2306. G

CHILD CARE days or evenings, full or part time, Experienced middle-aged woman. RAMONA KENNEDY. FR. 9-1127.

CHILD CARE, Ages 3 to 10 yrs. Fenced play yard, near school, days or nights. Hot lunches, naps if desired. OS. 5-7993. G

CHILD CARE, days or nights, licensed, near school, play yard, hot lunches, naps. OS. 6-6566. G

LOST

SUN GLASSES, prescription ground, dark brown leather case, lost on company property near Tooling Bldg., Plt. 1 about 2-3 weeks ago, $5 reward. JOSEPH A. DARATA, Box 2301. J

FOUNTAIN PEN, green and black, Sheaffer, sentimental value, lost between Northrop, Broadway and Menlo Ave. Box 2314. J

FOUND

CUFF LINK, Masonic, Box 2304. K

PERSONALS

SINCERE THANKS to the NRC and the bloodbank during my recent illness; also to all my friends. RUTH MAGUIRE. L

PLANTS ONE, TWO SCHEDULE REFILL FOR BLOOD BANK

Norcrafters from Plants I and II will be calling at the Red Cross Blood Bank on July 31 to replenish Northrop's deposit in the Red Cross Blood Center.

Statistics on the Northrop account at the Blood Bank indicate that between January 1949 and May 1956 Norcrafters and their families withdrew 5446 pints of blood. If this blood had been bought commercially at the minimum cost of $25 a pint it would have cost Norcrafters $136,150.

Special arrangements have been made this time for night shift personnel to participate in the blood donor drive. As a result, day shift Norcrafters will go to the NRC Clubhouse on July 31 between the hours of 9 a.m. and 2 p.m. for blood donations, and the night shift personnel will go from 5 to 9 p.m.

Department clerks have sign-up forms and additional information.

From the Travelers.

"Isn't the rain just dreadful?"

SPORTS

The Northrop News

NRC SPORTS CARS AT DAWN

OPEN AIR FRATERNITY IN BREAKFAST RALLY

That first cup of coffee is going to taste so good!

NRC Sports Car members are all set for their second annual Breakfast Rally on July 29.

This rally is for the hardy individual who likes nothing better than a brisk drive before breakfast and it may or may not be a coincidence that the tour is for all drivers and navigators whose names are NOT on the NRSCC Senior Driver and Navigator list.

In other words, the novice rallyists take over the trials and the senior members will stand by the working end of the rally . . . to provide times, directions, and a breakfast of coffee, bacon, eggs, hot cakes, and juice at the end of the two-hour run.

The first car will leave the Griffith Park entrance—off Riverside Drive and Los Feliz Boulevard—at 6:30 a.m. It will be a straight time and distance rally and will end at a spot in the mountains with the aforementioned breakfast.

Entry fee of $1.50 per car plus $1 for adult breakfasts—50¢ for children—is payable at the starting line.

Reservations may be made at the Plant I Personnel Activities office, Extension 2784. All Norcrafters invited.

NRC SONGSTERS IN ARROWHEAD TREK FOR AUGUST

The mountains around Lake Arrowhead will resound with song next August 4 and 5 when NRC Mixed Chorus members trek to the resort site for their monthly social outing.

As Comish Bill Porter says, "The outings are strictly social and do not take the place of the regular Tuesday rehearsals but when you get a lot of singers together there is usually a lot of singing."

Members will provide their own food. Lodgings will be in a large cabin at Lake Arrowhead. The trip will start at 9 a.m. from the NRC Clubhouse.

Reservations for the outing should be made prior to July 31 at the Personnel Activities office, Plant I.

The next two regular meetings of the Mixed Chorus group will be held on July 24 and 31 at 7:30 p.m. in the Clubhouse. All Norcrafters are invited.

Plans for the September social for the club, according to Comish Porter, include an overnight boat trip into Catalina waters.

INSTALL TM TOP AT FORMAL MEET —HONOR COOPER

At their mid-term installation of officers, Northrop day shift Toastmasters Club 212 formally introduced new officers: Doug Johnson, president; Joe Carver, administrative vice president; Tony Gayou, educational vice president, and Jim Watson, publicity director.

Lorne Bristol, Will Tolles and Elmer Cain remain in their present capacities as secretary, treasurer and sergeant at arms, respectively.

The meeting was also the occasion for a presentation of a service pin and symbolic plaque to Henry Cooper, former TM 212 president, who resigned to accept the appointment of Area Governor in Toastmasters International Area Number 5.

The Ladies

TOP BRASS—. Honored guests at recent Toastmistress installation of officers were Gertrude McMahon, president of International Toastmistress Clubs, Inc., second from left, and, next, Florence Strehlow, treasurer, International TM Clubs. Northrop TM officers pictured are, left, Rona Jefferson, new president, and right, Hetty Horner, past president. Northrop club joined Hawthorne and Twilight TM clubs in joint installation at NRC Clubhouse. Local groups received high praise from officials.

Model Craft Club Calls Kit Contest

They are calling it a Six Bit Scale Kit contest.

All Norcrafters and families interested in modelcraft are invited to participate in the August 6 meeting of the NRC Model Craft club.

This meeting will be turned over to judging entries for the Six Bit Scale Kit contest, which is an indoor performance contest for commercial kit model scale airplanes.

Rules of the meet, according to Club Commissioner Bill Feldt, require that the scale model be built entirely of sheet balsa using only parts furnished in the kit. Some of the printed design or color must be left on the exterior of the model to prove that this was done.

A hand-carved propeller may be substituted to improve performance.

"In order to stay safely within the rules of the contest," says Bill, "it is recommended that the kit be a Top Flite 'Jigtime' or a Cleveland 'Quicky' scale model."

The models are easily built in one evening, according to Feldt, and when properly constructed are capable of indoor flights exceeding two minutes.

NRC prizes will be awarded for the best flight. The meeting-contest starts at 7:30 at the NRC Clubhouse.

NEW NRC CLUB FOR ARCHERS— MEET TONIGHT

Prospective William Tells — attention!

All Norcrafters interested in the archery sport are invited to attend a meeting tonight in the NRC Clubhouse at 7:30 p.m.

Primary purpose of the meet is to reactivate the NRC Archery Club. A proposed program will be presented for discussion and a roster of participants will be made.

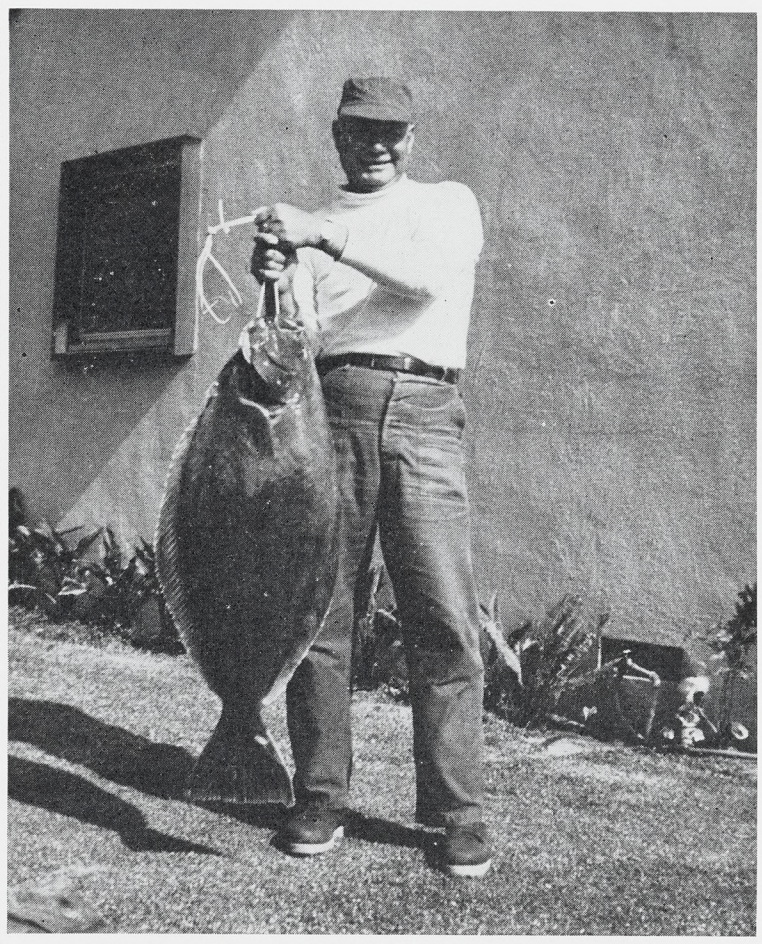
Highlighting the evening will be an expert shooting exhibition by nationally known archery champion Dick Green. Mr. Green will also lecture on all phases of archery and act as answer man for a question and answer period.

Night shift Norcrafters interested in the sport are invited to indicate their interest in a night shift club by contacting the Personnel Activities office, extension 2784.

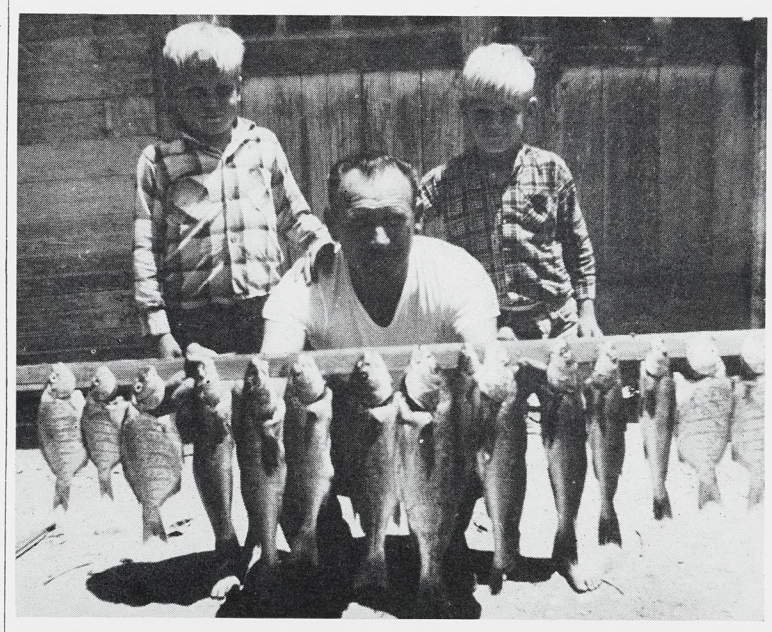
In line with the growing enthusiasm for archery at Northrop is a recent announcement from the Department of Fish and Game telling of the opening of archery deer season in coastal areas on July 21.

The general early archery season closes July 30 with a bag and possession limit of two bucks, forked horn or better. A special Los Angeles area season runs through December 31 with a bag and possession limit of two deer of either sex.

Prizes From Sea



WORTH A BIG SMILE—. Andrew Williams, Plant Protection guard, beams happily as he displays 34-pound 10-ounce halibut he snagged from boat Jett II out of Newport Beach. Andy used a spinner with an 18-pound test monofilament line and anchovies for bait. Williams beat his own record a few days later with a 37-pound halibut hooked at Redondo Beach with the same line and bait.



THREE SURF FISHERMEN—. Norcrafter John Pawlicki and nephews Pat, left, and Mike, right, pose proudly with a day's catch of spot fin croaker, yellow fin croaker, corbina, and perch. Catch made in South Laguna Beach.

PA Has Discount Ducats To Catalina, Dances, D-I-Y Show

Catalina Island bound Norcrafters are invited to take advantage of special charter rate tickets now available in Personnel Activities offices.

The discount ducats are $5 each (regular fare is $6.50) and includes a round trip to Catalina plus free parking at the Long Beach landing. Children may travel at half fare.

The special charter boat leaves the Long Beach Pacific Landing at 9 a.m. and returns at 5:30 p.m. Round trips are made daily Friday through Monday.

Norcrafter dance enthusiasts may pick up discount ducats for Northrop nights at two local ballrooms. The first invitation is from the Hollywood Palladium where Norcrafters may dance to the music of Luis Arcaraz and his orchestra on July 21. Arcaraz is well known as Mexico's greatest exponent of American dance.

The next dance dates will be on August 3 and 5—with Lawrence Welk and his champagne music at the Aragon Ballroom in Ocean Park.

Also on the bargain table in the PA office are exchange tickets which entitle personnel to 40¢ off on Do-It-Yourself Show tickets.

The Do-It-Yourself Show which starts tomorrow at the Pan Pacific Auditorium is reputed to be the biggest in the nation and is scheduled to run through July 29.

Norcrafters in outlying facilities are advised to contact their PA representative for ducats.

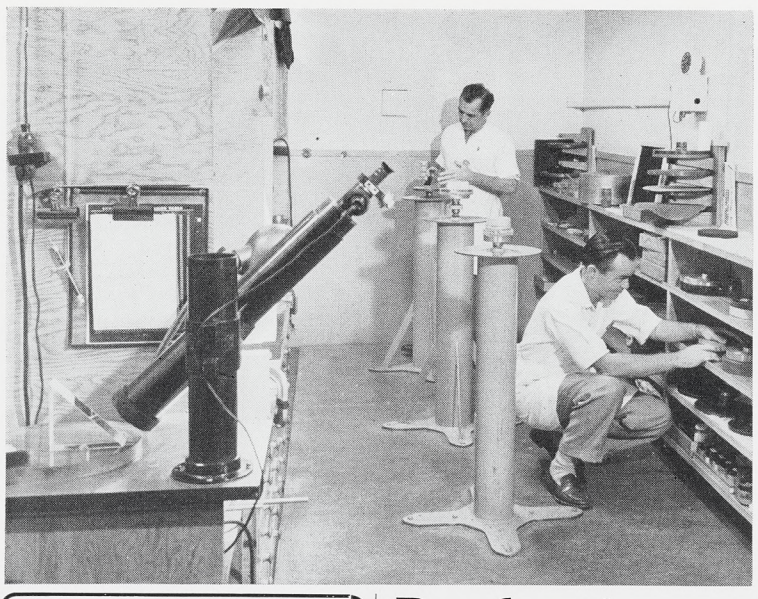


PHOTO FEATURE:

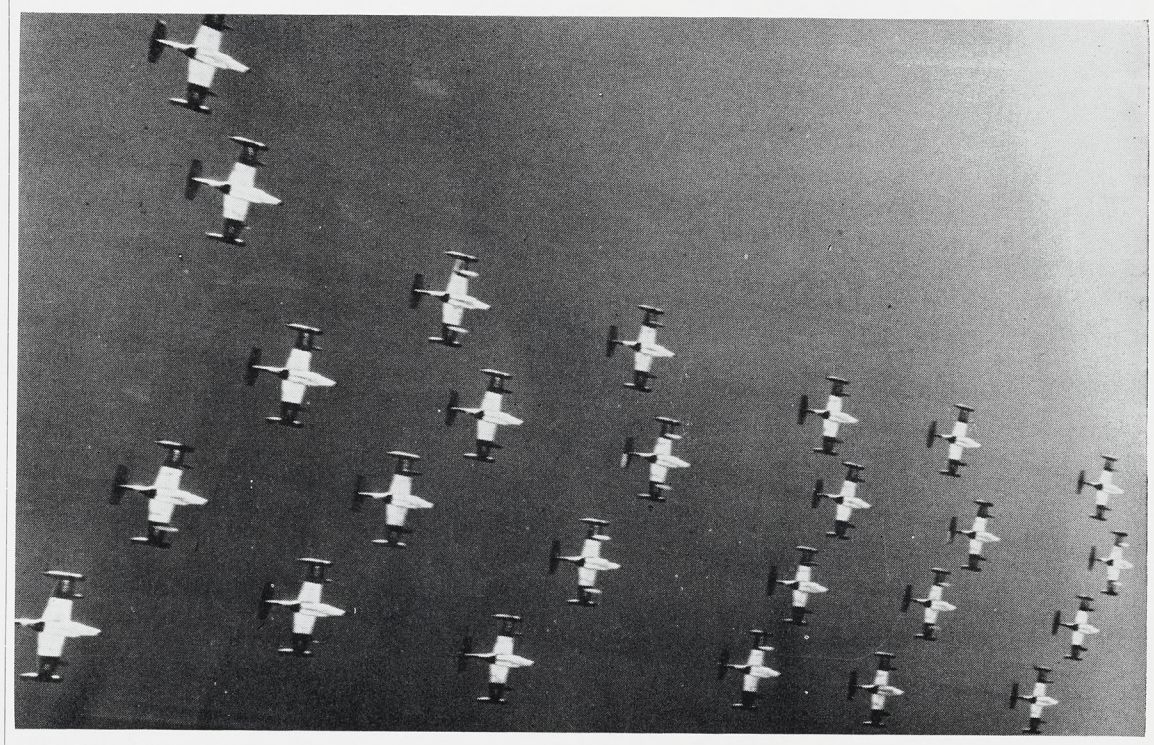
Northrop News Pictorial

Perfection—

MILLIONTH of an inch is mighty big, should precision and reliability fail on optics at Pasadena Optical Lab. But such critical perfection is workaday for Snark missile program. Northrop Pasadena technicians Hans Winkler and Lowell Russell hand-lap lenses for final perfection.

SILICON JEWELS — . Most plentiful element in the earth becomes most precious under delicate manufacturing processes at Pasadena. Millionth of inch error here could mean hundreds of miles off course for guided aircraft or missile. Products shown include— concave, convex mirrors and lenses, optical flats, prisms, wedges. Reliability is Pasadena everyday watchword.

Scorpions Parade for Defense Through Alaska's Arctic Skies



SCORPIONS in the air—. Alaska skies thunder with the power pulse of jet engines as Ladd and Elmendorf Air Force bases put up rocket training squadrons.

PHOTO ABOVE — Ladd AFB's 18th Fighter Interceptor Squadron in 25-Scorpion fly-by. Note pylon fuel tanks, distinctive markings.

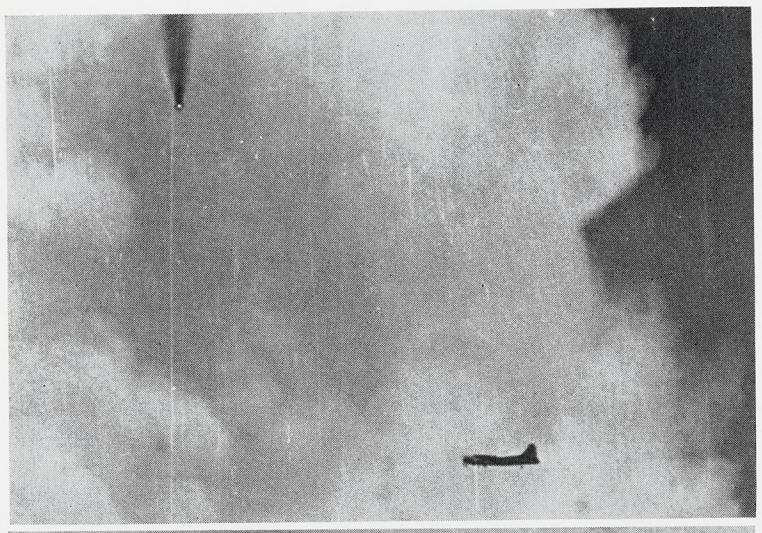
RIGHT — Elmendorf AFB's 64th FIS makes three turnarounds with 26 aircraft and logs 152 flying hours in a 10-hour period, for what is believed to be a worldwide flying record.

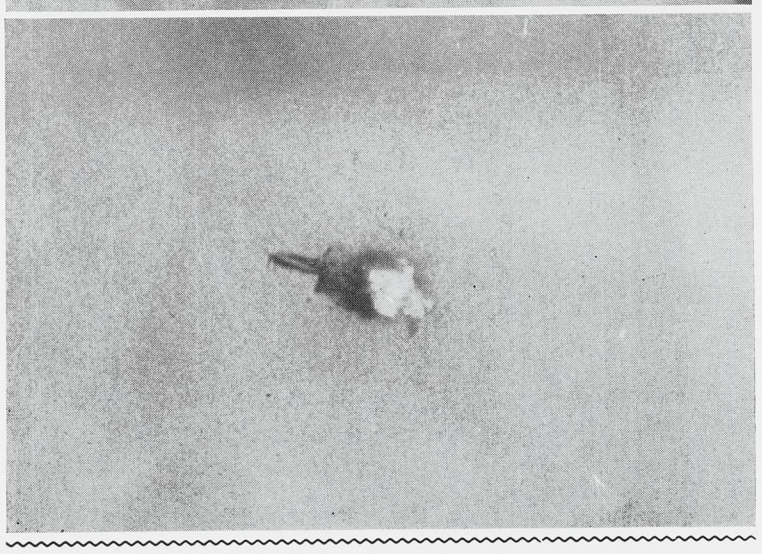
QUEEN—. David Grabau, Electro-Mechanical Planning, dances with daughter Ellen, 16, following her coronation as queen of the recent Manhattan Beach Fun Fair. Ellen's mother is Dorothy Grabau of Standard Tooling and Development. (So. Bay Breeze pic.)

Blue Ribbon

SKOYA—. The 40-foot yawl Skoya owned by Norcrafters Scott Rice and Corbin Strickler is pictured in home harbor following seventh place win in recent Newport to Ensenada Yacht Race. Boat Club members are readying for annual Labor Day Catalina Island cruise.

F-89 SCORPION SCORES FIRST FALCON KILL



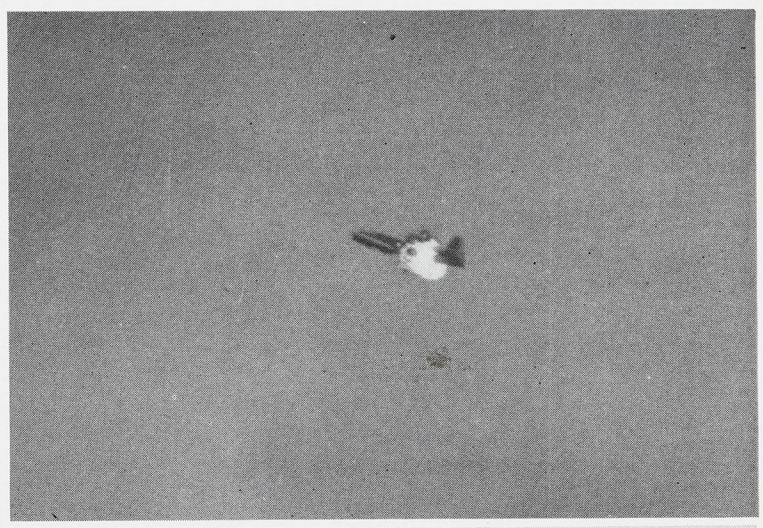


FIRST photos from Eglin Air Force Base show how Falcon air-air missile kills. Tests, recently concluded, baptized Falcon. Scorpion—was first to score. One of pix caught Falcon (see propellant smoke, flame upper left) homing on QB-17.

SCORPION has launched a Falcon and it's a—hit! Pilot and RO—Colonel Louis E. Andre, 3241st Test Group, and Squadron Leader George T. G. Richards, Royal Air Force, get high thrill of seeing their "bird" blast drone target amidships.

INSTANT later—. '17 is engulfed in boiling flame, mortally wounded and not long for this world. Pieces of aircraft are showered into the air. Scorpion is maintaining safe distance.

NOW LOOK at this! Drone clings to life—flies the best it can without a tail. Tail also tries, but staunch old WW II work horse is dying. Scorpion twin jet power and electronics and trained crews, plus Falcon electronic brain usher in new spine-chilling era of air warfare.



Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, August 1, 1956

AF Scorpion Squadrons Shoot for Yuma Honors

Four F-89D Scorpion teams will compete with five F-86D groups for the USAF Rocket Firing championship in Yuma on October 13-18. The nine teams will be contending for the title won last year by the Eastern Air Defense Force.

Following a series of elimination meets, these Scorpion teams qualified to represent their respective commands:

27th Air Division — Western Air Defense Force. The 27th is based at Norton Air Force Base.

59th FIS—Northeast Air Command—based at Goose Air Base, Labrador.

10th Air Division — Alaskan Air Command—Elmendorf AFB, Alaska.

57th FIS—MATS—Iceland.

The Eastern Air Defense Force will be represented by the 30th Air Division, and the Central ADF by the 20th (flying '86s). These, with the Western Air Defense Force, are Air Defense Command teams.

Other F-86D teams will be firing for the Air Training Command, the Far East Air Force, and the USAF in Europe.

The first USAF rocketry meet was held in Yuma in 1954, when a team from Crew Training Air Force, ATC, swept the title. Four teams competed that year.

The entry list climbed to eight in 1955, when EADF nosed out Air Training Command in the last day's firing. Northeast Air Command's Scorpions came in a close third in the competition.

Luckman to M-C Speak On Friday

Last-minute calls for ticket reservations to Friday night's Management Club meeting are being answered Thursday and Friday by Ticket Chairman Larry Poynter, Ext. 474.

The club has scheduled, as principal speaker of the dinner, Charles Luckman, partner in Pereira & Luckman, architectural engineering firm. George Gore, Northrop secretary and corporate counsel, will preside over the Question-Answer portion of the evening's activities.

Luckman's talk, Program Chairman Swede Swearingen said last Friday, is on "Horizons of Tomorrow".

The meeting is being held at the Rodger Young Auditorium, 936 W. Washington Blvd., Los Angeles. Cocktail hour begins at six; dinner is served at seven, with the choice of ham steak or fish course.

In addition to the regular fare of free raffle and attendance prize, the club has arranged to award a valuable prize to the wearer of the "loudest" sport shirt. This is "Sport Shirt Night", President Ralph Hampton said.

SYDNEY HERALD ASKS FOR INFO ON NORTHROP

Northrop has been selected, as one of the major aircraft manufacturing concerns in the United States, for representation in the Sydney (Australia) Morning Herald special aviation edition to be published in August.

In addition to special stories and pictures of Northrop products the publication has asked for information on the type of jobs former men "from down under" are doing at Northrop.

Any Norcrafter who hails from Australia may send information to the Northrop News office giving a brief job description, differences in working conditions in the two countries, his home locality, or other items of interest.

MAN VS SUPERSONICS

Air Force Men Visit-- Talk Snark

A class of veteran Air Force navigators, bombardiers, ROs, and other observers were scheduled to visit Northrop yesterday to study the performance, technical characteristics, and planned employment of the Snark.

The visiting personnel, who include electronic counter-measures officers, aerial engineers, gunnery officers, in addition to those named above, have been in the observer field for 10 to 20 years.

They are members of a class called the Senior Observer Technical Specialists Course. Objective is to produce officers prepared for staff assignments requiring sound technical advice on policy, technique, and development requirements.

A number of top Northrop personnel, headed by Vice-president Edgar Schmued, Engineering, greeted the visiting class. Northrop specialists spoke on various phases of the Snark program.

The class discussed details of propulsion, flight control and guidance systems, and ground handling equipment of the Snark.

NEW NORTHROP DOCTORS TO RESEARCH HUMAN SPEED LIMITS

Scientists at Northrop are continuing studies to determine the limits of man's mental and physical abilities to command supersonic aircraft, Edgar Schmued, Northrop vice-president in charge of Engineering, announced last week.

Northrop has assigned Psychologist Gerald F. Rabideau and Physiologist J. Gordon Wells to conduct advanced studies in the field of human factors engineering in order to determine the practical points in terms of high speed flight at which man's mental and physical abilities must be subordinated to the robot "brains" of electronic computers and the "muscles" of servo-mechanical systems.

Findings of Dr. Rabideau and Dr. Wells will be used by Northrop designers assigned to high speed aircraft projects, including development of the new supersonic jet training airplane.

They will carry out their programs under the direction of Earl L. Eckerson, head of Northrop's Human Factors Engineering and Equipment Design section.

Dr. Rabideau is recognized as authority in psychology as applied to aeronautics and training. Prior to joining Northrop, he conducted a 15-month program for the Rand Corporation to specify equipment and procedures necessary to train personnel for the new SAGE air defense system direction centers as well as for the present defense network.

Previously he carried out studies for one and one-half years for the American Institute for Research of Pittsburgh, Pa., related to determining design requirements for U. S. Air Force training equipment. He also conducted a two-year research pro-

(See DOCTORS—page 2)

Appointments Involve Four At Anaheim

The Anaheim Division figured prominently in promotions announced last week in the plants.

At Anaheim James J. "Jim" Ward was named assistant division manager, an announcement from Thomas H. Quayle, manager, stated, and Charles A. Kerner, formerly assistant base administrator at Florida, became chief engineer.

Anaheim's manager of Industrial Relations, William L. Aldrich, was named assistant director of Northrop Industrial Relations. He was succeeded in the Anaheim

(See PROMOTIONS—page 2)

Reliability
FOR SNARK QUALITY

Roland J. Pagen Honored At Finance Testimonial

Roland J. Pagen, Northrop director, vice-president and treasurer, retired last week with just about the greatest tribute being paid to him that ever comes to a man in industry.

The tribute is the love, affection and respect paid a chief or a fellow worker when he puts away his tools for rest in the years ahead. Such feeling was expressed to Mr. Pagen by the entire membership of the division last Friday.

Behind the scenes preparation for the event had been under way immediately following his announcement to retire his vice-presidency and treasurership three weeks ago. (See Northrop News—July 4, 1956.)

Mr. Pagen retains his Board of Directors chair and is company finance chairman for that body.

A leather-bound album containing personal best wishes signatures of all 640 Finance Norcrafters was presented to him in his office at Plant Four. The album also contained photographs, news clippings, financial reports and details of outstanding events at Northrop Field that highlighted his 12-year tenure.

A "secret" presentation was a fine painting of Scotland's Loch Lomond. When he was a young man, Mr. Pagen walked the shores of Loch Lomond and always thereafter cherished the beauty of the place—and considered it an inspiration.

The painting was a wrapped "do not open" gift. His first glimpse of the gift was when he arrived home Friday evening. It had been hung above the fireplace in his Beverly Hills residence.

Friday night, actual going away testimonial ceremonies were held at the Beverly Hilton.

Chairmanned by Charles Cilley, new company treasurer, Mr. and Mrs. Pagen received the plaudits with obvious and deep emotion.

Said Cilley: "—an occasion that does not require oratory. It is our hope that you and Mrs. Pagen carry away from this gathering the most pleasant memories—."

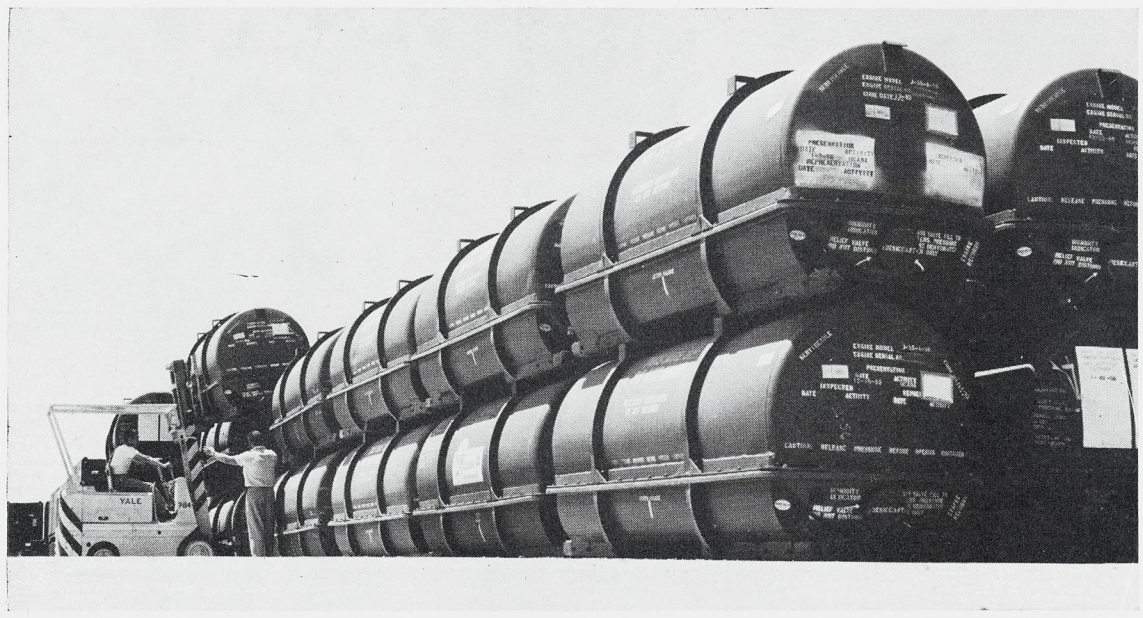
The toast by George Forbes, Northrop paymaster: "During your retirement, Mr. Pagen, we wish you and Mrs. Pagen many years of happiness and assure you by this gesture tonight of our sincere appreciation for the privilege of working with you and the many fine things you have done for all of us.

"Proud indeed, we are, to raise our glass to you, sir.

"The very best to you always."

First item on the Pagens' retirement agenda is a typical one and bespeaks the good and average American citizens that they are. They intend to relax at home and to do some world traveling.

All Norcrafters join the Finance Division in extending their very best to fellow worker Roland J. Pagen and his missus, and of course, we would like a post card now and then, perhaps one from Loch Lomond.



SCORPION POWER—. Lift operator C. M. McCalman and Harold Smith, Palmdale, are working at stacking Allison J-35-A-35 jet engines that power F-89 Scorpions. These are units which are in storage in the containers which protect new engines in shipment. Stored outside until needed, the engines are checked periodically to insure their condition. Activity pictured is part of bustling IRAN program.

New Engine Run-up Site At Palmdale

Palmdale Norcrafters are effecting daily substantial savings in time and costs with the use of a new run-up stand developed to test the twin engines of F-89J Scorpions.

The installation was constructed at a fraction of the cost of comparable existing facilities. It combines standard U. S. Air Force equipment, actual controls from F-89 aircraft, and a specially-built, safety-designed concrete platform.

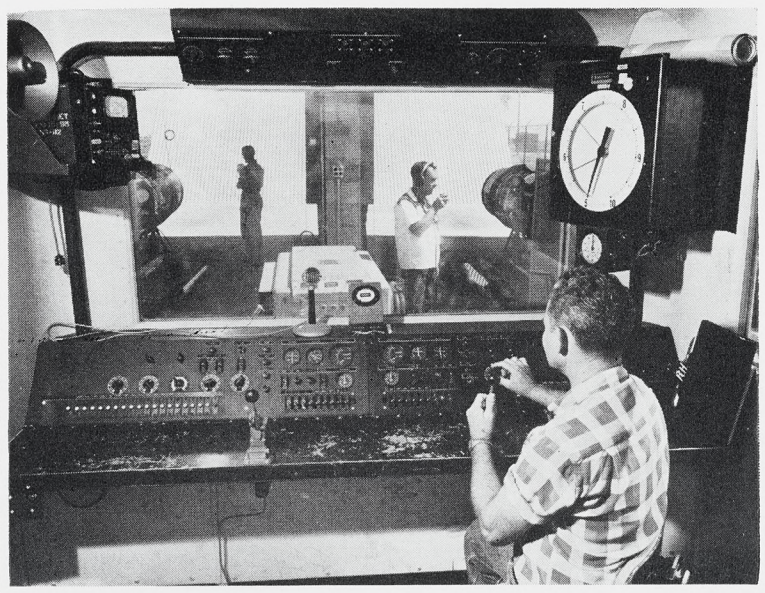
Air Force representatives at the Air Materiel Area headquarters, Ogden, Utah, cooperated with a company design and development team headed by Mark Berry in equipping the stand.

Installation of the stand resulted from the stepped-up conversion of operational Scorpions into F-89J airplanes at Palmdale. In connection with the F-89J program Palmdale is conducting an extensive IRAN (Inspect and Repair As Necessary) schedule on all aircraft coming in from the field.

The new stand can handle both the Scorpion's twin engines at one time. Both are readily accessible to mechanics, and minor adjustments can be made easily and in perfect safety while the engines are running.

Previously it was necessary to install the engines in the airframe, check each engine individually, and then lower the engines for correction.

A concrete "floating" engine pad eight feet deep cushions the engines. Surrounded by a layer of expansion felt, the pad eliminates extraneous vibrations.



"BRAIN" of new engine run-up stand at Palmdale is air-conditioned control center shown. R. W. Wallis is operator. In rear are technicians L. R. Platts, right, and L. R. Pierce. Two engines can be run up simultaneously. Dual engine control panel duplicates Scorpion functions. Large dial is an electronic timing clock for test programs.

Florida New Pilots-- Papish and Stallman

Two new pilots, Donald H. Papish and John E. Stallman, have joined the Northrop team in Florida, the Flight department has announced.

Papish is an ex-Air Force fighter-interceptor pilot who flew Scorpions with the 65th Fighter Interceptor Squadron in Alaska. After his hitch in the AF, Don was co-pilot in the Pan-American World Airways organization until his association with Northrop.

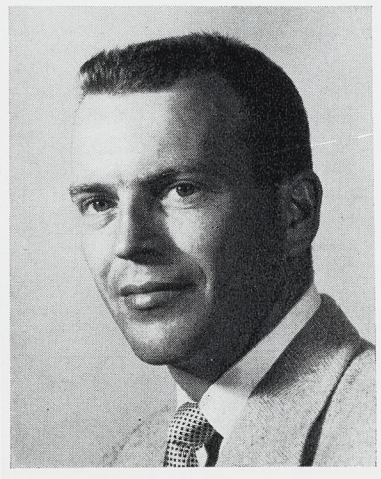
Papish is a newly-wed, having married Carole Goldsmith in June of this year. The couple is living in Melbourne. Don, like Stallman, is assigned to the bailed aircraft at Patrick Air Force Base in support of missile test program at Cape Canaveral.

Stallman is an ex-Marine Corps night fighter pilot, who originally completed Navy flight training in 1944, and was recalled to active service during the Korean conflict.

Returning to the States in 1953, Stallman was a transport pilot for two and a half years, instructed in survival techniques, and served as staff pilot at the Marine Corps Air Station in El Toro.

John and his wife, Delight Jaax, have two children, Sonnee Delight, age nine, and Janeau Jo, age six.

DON PAPISH



JOHN STALLMAN

Doctors--

(Continued from page 1.)

gram in industrial psychology at Purdue University.

He received his doctorate at Purdue and holds master's and bachelor's degrees from the University of Wisconsin.

Prior to joining the Northrop research group, Dr. Wells spent seven years at the USAF School of Aviation Medicine, Randolph Air Force Base, Texas, as an aviation medical physiologist in the department of physiology-biophysics.

Last year Dr. Wells was a senior investigator in a team of six Air Force volunteers that resided atop 14,000-ft. Mt. Evans, Colorado, for eight weeks.

As a result of the Mt. Evans studies, the AF will increase altitude tolerance by 5000 feet.

Dr. Wells was awarded his doctorate at the University of Southern California. He is a member of the Aero-Medical Association, the American Men of Science and the Society of Experimental Biology and Medicine.

Company Promotions -- Hawthorne -- Anaheim

(Continued from page 1.)

post by Edward J. Baum, formerly executive assistant to the director of Industrial Relations.

Ward, a 15-year Northrop veteran, was production manager at Anaheim for a year prior to his present appointment. Before that he had been chief of Quality Control there, moving from Hawthorne in November, 1952.

Jim's last position at Hawthorne was as assistant chief inspector in charge of night operations.

Bill Aldrich was assistant manager of Engineering Personnel at Hawthorne when he moved to Anaheim in January, 1953, as assistant manager of Industrial Relations there.

He was named manager on October 13, 1953, and held that post until his new appointment, which is effective today.

Aldrich has over 20 years' experience in the field, and has won several awards from various organizations for his contributions to the field of personnel administration.

Chuck Kerner, who moves from Florida to Anaheim, is one of the "old-timers" in the missile field, having worked in that area of operations since his service days in World War II.

With Northrop for more than 10 years in design and engineering administration, Kerner will report to Harold Black, director of Northrop-Anaheim Engineering.

Ed Baum is a Pepperdine College graduate who came to Northrop in 1950, and became the Selective Service coordinator. Prior to that time he had been manager of the Hawthorne Chamber of Commerce.

In late 1951 he was named staff assistant to the director, Industrial Relations, and later was upped to executive assistant.

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 24

Published every other Wednesday
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
Permission to republish material with credit to the Northrop News will be granted.
News office phones—2456, 2457. Outside lines—OR 8-9111, OS 5-4611.

"Going My Way" forms are available from department clerks at all Northrop facilities, from PA offices, the Personnel department, Industrial Relations offices, lobbies, and the Northrop News Office.

Deadline is Wednesday noon before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 7)
NORMANDIE & 220TH, Torrance. (Room for three, route either Normandie or Western to 146th to Arlington to Plant, will go a little out of way.) C. L. FITZJARREL (5507-14710, Ext. 526), FA 8-2433. 12-7

(Zone 13)
BEVERLY DRIVE AND OLYMPIC BLVD., Beverly Hills. (Will pick up anywhere along Olympic from Beverly to La Cienega or down La Cienega from Olympic to Manchester.) DAN GUGGENHEIM (1810-44773 Ext. 2675) CR 5-3475. 12-13

7:30 a.m. — 4:15 p.m.

(Zone 3)
AZUSA AVE. & WALNUT CREEK PARKWAY, West Covina. (Need one person to complete car pool.) LESTER M. HAVERLY (3551-35087, Ext. 2140, 2149), EDgewood 9-2687. 13-3

(Zone 4)
FIRESTONE & CALIFORNIA, South Gate (west on Manchester Ave., south to plant). M. BROWN (9350-27999, Ext. 1810) LU 4-3077. 13-24

(Zone 5)
LA PALMA & MOHAWK, Anaheim. (Car pool desired.) RALPH W. McKENZIE, JR. (5918-44350, Ext. 2614). 13-5

(Zone 10)
HIGHLAND & MANHATTAN BEACH BLVD, Manhattan Beach. (Route: Manhattan Beach Blvd. to Sepulveda, Sepulveda to El Segundo Blvd., El Segundo Blvd. to Northrop.) E. M. MARTIN (1421-43443, Ext. 691). 13-10

(Zone 13)
VENTURA & TOPANGA CANYON RD., Woodland Hills. (Car pool considered.) B. M. HOLT (8620-15869, Ext. 1795).

FALLBROOK & VENTURA BLVD., Woodland Hills. (Topanga Canyon to 101, 101 to Lincoln, Lincoln to Century; will change route.) T. M. CLARK (3410-13093, Ext. 445). DI 7-0531. 13-13

(Zone 14)
STOCKER & DON FELIPE DR. (near Crenshaw), Los Angeles 8. (Car pool desired.) CHARLES M. MILLER (3472-30767, Ext. 406, 1949, 1988). 13-14

CRENSHAW & SANTA BARBARA or Crenshaw & Stocker, Los Angeles 8. (Car pool desired.) CHARLES MILLER (3472-30767, Ext. 1949). AX 4-2529.

7:30 a.m. — 5:15 p.m.

(Zone 4)
WHITTIER BLVD. & RUSSELL, Whittier. (My preference would be to have a ride, second would prefer to drive, third a car pool.) CHAS. DE LISLE (5130-15676, Ext. 1314). OX 7-8258.

(Zone 5)
LA PALMA & SANTA ANA FREEWAY, Anaheim. (Car pool desired.) PAUL VANDERSCHANS (3113 - 30640, Ext. 1368), KEystone 3-1758. 14-5

3:45 p.m. — 12:15 a.m.

(Zone 4)
ROSEMEAD & BEVERLY RD., Pico. (Beverly to Rosemead to Imperial to Crenshaw to Plant 3; will change route for more riders.) L. R. SLININGER (5515-23224, Ext. 2646), OX 9-5428.

(Zone 8)
ALMA & 10th, San Pedro, (Route: Western Ave. from San Pedro to El Segundo Ave.) D. W. CALLARD (5515-20154 Ext. 1825) 16-8

4:45 p.m. — 1:15 a.m.

(Zone 5)
GILBERT & CARSON, Anaheim. (Car pool desired.) F. H. MALTSBERGER (5587-27124, Ext. 1578), GA 9-0808.

(Zone 13)
SEPULVEDA & SAWTELLE. ARTHUR WEISS (5621-40670 Ext. 2208) EX 8-0500. 16-8

Miscellaneous — (Split Shift)

(Zone 13)
PICO & SEPULVEDA BLVD., West Los Angeles. (Car pool considered; hours: 4:15 p.m. to 12:45 a.m.) PETER P. GARRIGAN (5538-19911, Ext. 525), GR 9-1896. 20-13

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 3)
HOOVER & MANCHESTER, Los Angeles. RANDALL LEE (5360-42383, Ext. 1624), PL 8-3011. 2-3

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 8)
TORRANCE & WESTERN, Torrance. BERTHA L. CHIRCH (5340-43222, Ext. 1975 or 1641), FA 8-8524. 2-8

ARLINGTON & TORRANCE BLVD., Torrance. BARBARA PENKE (3410-27944, Ext. 445), FA 8-1628. 2-8

7:30 a.m. — 4:15 p.m.

(Zone 1)
CRENSHAW BLVD. & 81ST ST., Inglewood. LEE MASSEY (5120-14338, Ext. 713), PL 3-6217. 3-1

(Zone 2)
MANCHESTER & VERMONT OR HOOVER, Los Angeles 44. (Car pool desired.) G. BUTTIE (5262-38005, Ext. 1669, 2134). PL 9-3163. 3-2

(Zone 3)
AZUSA AVE. & WALNUT CREEK PARKWAY, West Covina. (Need one person to complete car pool.) LESTER M. HAVERLY (3551-35087, Ext. 2140, 2149), EDgewood 9-2687. 3-3

(Zone 4)
FIGUEROA & 120TH, Los Angeles 61. DEE RIVELLO (1421-12239, Ext. 691), PL 6-3818. 3-4

(Zone 5)
LA PALMA & MOHAWK, Anaheim. (Car pool desired.) RALPH W. McKENZIE, JR. (5918-44350, Ext. 2614). 3-5

LA PALMA & GRAND or Orangethorpe & Stanton, Buena Park. BETTY COTA (9330-38880, Ext. 2228). 3-5

(Zone 6)
REDONDO BEACH BLVD. & VERMONT, Gardena. PATT RILEY (3600-41390, Ext. 2439), DA 3-0224. 3-6

(Zone 8)
LELAND & 13TH STS., San Pedro. (Ride wanted or car pool.) MARGIE SCEGRAVES (5940-43157, Ext. 2661), TE 3-5660. 3-8

(Zone 9)
PALOS VERDES BLVD. & LILLIAN, Torrance. (Southwood Homes.) WENDY THWAITS (1421-12202, Ext. 691), FR 6-2256. 3-9

PALOS VERDES DR. NORTH & EASTVALE RD., Rolling Hills. (Live in Westfield area.) BETTY JO SNODGRASS (2130-44802, Ext. 2535), FR 7-1144. 3-9

SEPULVEDA & KATHRYN, Torrance. SHIRLEY ZIMPRICH (1500-14459, Ext. 505), FR 5-7538. 3-9

(Zone 10)
HIGHLAND & MANHATTAN BEACH BLVD., Manhattan Beach. (Route: Manhattan Beach Blvd. to Sepulveda, Sepulveda to El Segundo Blvd., El Segundo Blvd. to Northrop.) E. M. MARTIN (1421-43443, Ext. 691). 3-10

COMPTON & KORNBLUM, Hawthorne. DEANNA STELLA (1421-44330, Ext. 691), OS 5-4819. 3-10

(Zone 12)
COLORADO ST. & BUNDY, Santa Monica. (Can meet at Bundy or Lincoln Highway.) JOSEPH C. FISCHER (3120-43002, Ext. 463, 2148), OR 2-0324.

(Zone 13)
VENTURA & TOPANGA CANYON RD., Woodland Hills. (Car pool considered.) B. M. HOLT (8620-15869, Ext. 1795).

HAWTHORNE BLVD. OR PRAIRIE & 104TH, Lennox. M. JEANETTE BLANK (1421-44804, Ext. 691), OR 7-2711. 3-13

(Zone 14)
LA BREA & WILSHIRE BLVD., Los Angeles 36. A. A. SALTER (3543-43998, Ext. 2460), WE 6-8605. 3-14

STOCKER & DON FELIPE DR. (near Crenshaw), Los Angeles 8. (Car pool desired.) CHARLES M. MILLER (3472-30767, Ext. 406, 1949, 1988). 3-14

SANTA BARBARA & BUCKINGHAM RD., Los Angeles 8. JULIE ELLIOTT (3420-13108, Ext. 626). 3-14

MANCHESTER & CRENSHAW, Inglewood. PAT CARLBERG (3100-12574, Ext. 440), PL 2-4654. 3-14

7:30 a.m. — 5:15 p.m.

(Zone 4)
WHITTIER BLVD. & RUSSELL, Whittier. (My preference would be to have a ride, second would prefer to drive, third a car pool.) CHAS. DE LISLE (5130-15676, Ext. 1314). OX 7-8258.

(Zone 5)
LA PALMA & SANTA ANA FREEWAY, Anaheim. (Car pool desired.) PAUL VANDERSCHANS (3113 - 30640, Ext. 1368), KEystone 3-1758. 4-5

Sheriff's Annual Rodeo Draws Top Bronc Artists

The Old West was never like this.

When the Sheriff's Relief Association's Twelfth Annual World Championship Rodeo commences at 2:30 p.m., Sunday, August 19, audiences will see handsome movie star cowboys, lovely starlets, and a concentration of the world's top rodeo talent.

Rex Allen, Republic Pictures cowboy star, will take a featured spot in the event. Queen of the Rodeo will be Natalie Woods, movie starlet, and Grand Marshal will be Clint Walker—better known to movie and TV viewers as "Cheyenne".

Endorsed by the Rodeo Cowboys' Association, the show will include five arena events—bare back and saddle bronc riding, calf roping, steer riding, and wild Brahma bull riding in which famous rodeo stars will compete for prizes totaling $12,500.

There will be additional exhibitions of fancy roping and trick riding by such rodeo greats as Edith Happy, Pat North, Monty Montana, and others.

General admission tickets are available in the Personnel Activities office, Plant I, at $1.25 each—children's tickets are 50c—and may be exchanged in the Los Angeles Memorial Coliseum box offices for reserved seats. Reserved seat prices are $2.50 and $3.75.

RIDES WANTED

7:30 a.m. — 5:15 p.m.

(Zone 8)
ARLINGTON & PLAZA DEL AMO, Torrance. (Working hours are 8:00 to 4:45 but wouldn't mind a 7:30 to 5:15 ride.) JO ANN BACON (8310-44926, Ext. 2402), FA 8-2590. 4-8

8:00 a.m. — 4:45 p.m.

(Zone 8)
ARLINGTON & PLAZA DEL AMO, Torrance. (Working hours are 8:00 to 4:45 but wouldn't mind a 7:30 to 5:15 ride.) JO ANN BACON (8310-44926, Ext. 2402). FA 8-2590. 5-8

4:45 p.m. — 1:15 a.m.

(Zone 5)
GILBERT & CARSON, Anaheim. (Car pool desired.) F. H. MALTSBERGER (5587-27124, Ext. 1578), GA 9-0808.

(Zone 13)
SEPULVEDA & JEFFERSON or Hazelton & Jefferson, Culver City. GRACE CARSON (5930-19287, Ext. 3-231), VE 9-8246. 8-13

Miscellaneous — (Split Shift)

(Zone 10)
INGLEWOOD & W. 134TH, Hawthorne. (Hours: 8:30 a.m. to 5:15 p.m.) ELIZABETH DEDMON (1422-448-43, Ext. 696). 10-10

(Zone 13)
PICO & SEPULVEDA BLVD., West Los Angeles. (Car pool considered; hours: 4:15 p.m. to 12:45 a.m.) PETER P. GARRIGAN (5538-19911, Ext. 525), GR 9-1896. 10-13

(Zone 14)
RIVERSIDE DR. AND COLFAX AVE., No. Hollywood (Hours: 7:15 a.m. to 4:15 p.m.) W. L. EGGLESTON (5980-22892 Ext. 2600 or 636) 10-14

SAFETY CHIEF JOHNSON SPEAKS AT POINT MUGU

By special invitation of Captain J. C. Alderman, USN, Commanding Officer of the U.S. Naval Air Station, Point Mugu, Lee Johnson, Northrop chief Safety Engineer, visited the Navy facility recently to address personnel on the subject of electronic safety.

The audience was comprised of civilian and military supervisors and safety committee members.

Title of Johnson's talk was "Personnel Safety in Electronic Laboratories."

Prior to Johnson's invitation to address the Point Mugu group, excerpts of his speech before the 43rd annual National Safety Congress were printed in the Navy Department publication "Safety Review".

MANUFACTURING CONTROL HOSTS SUMMER DANCE

The only Norcrafter sponsored dance on the summer agenda will be the Manufacturing Control Summer Dance to be held August 11 at the Mayflower Ballroom in Inglewood.

All interested Norcrafters are invited. Dancing will begin at 9 p.m. and last until 1 a.m.

Tickets at $1 per person are available from members of the Manufacturing Control ticket committee or at the door.

Budge's Baby Takes Honors In News Show

When Scott Budge, Associated Projects Office Norcrafter, snapped the picture below of his son Gary—22 months—and the family's pet parakeet Pretty Boy, he only intended it as a sort of progress report for Gary's grandmother.

After the picture arrived at grandma's house in Oklahoma City that lady, with true grandmotherly pride, promptly entered the snap in the Oklahoma City Times newspaper photo contest where it took top prize.

GRANDMA'S PRIDE wins.

Following the newspaper win, Scott received a letter from a professor at Oklahoma City University requesting copies of the picture suitable for framing to hang in one of the classrooms.

Queried by Northrop News reporter on whether the picture was posed, Scott laughed, "Are you kidding? You just don't pose a 22-month old boy and a bird. When I decide it is time to have another picture of Gary, I load my camera and follow him around for a few hours. I usually get a few good shots out of a roll of film."

Scott, incidentally, is also NRC day shift Camera Club commissioner.

Godfrey and Friends

ARTHUR GODFREY, famed radio and TV personality, and staunch advocate of air power, was guest of 126th Fighter Interceptor Squadron, Air National Guard, recently in Milwaukee. Godfrey is seated in RO seat. Shown with him: Captain D. K. Weeks, Major R. E. Daniels, Captain H. A. Stroschin, Lieutenant C. H. Grede, Major P. B. Dowd, Colonel S. M. Levenson (CO of 128th Air Defense Wing) and Major R. E. Mielke. Godfrey is scheduled to be toastmaster at Air Power Award banquet Saturday night in New Orleans, where Air Force Association is holding annual meet.

BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday one week before publication.

FOR SALE

MOTORCYCLE, H. Davidson. 1946. 45 H.P. $135, terms if necessary. L E. PUMPHREY, KE 5-1877, Anaheim. A

NASH, 1948 Ambassador sedan, $100. E. C. FOX, FR. 9-1397. A

SPORTSMAN'S TOP for ¾ Chevrolet, bed w/springs and mattress, $200; 10' x 12' WALL TENT, used once, $35. S. B. HICKS, OS. 6-1471. A

AUTOMATIC WASHER, ABC, $25. G. E. FAUCETT, DA 3-3384. A

HOUSE, 3-bedroom, bath and ¾, patio, w/w carpet, drapes, double garage. Hollypark. FRIEDA HENLEY, PL 6-1726. A

MERCURY, 1951 2-door, lowered. nosed & decked, $885. DA 4-6970 after 6 p.m. A

HOUSE, 3-bedroom, rumpus room, tool shed, tennis court, fireplace, Hawthorne, $14,500. OS 6-8118. A

MIXMASTER, Sunbeam; LAWNMOWER, grass catcher, $5 each. EUGENE F. GAGLIARDI, RE 5-8807. A

BOAT COMPASS 4" Gimbal mounted, free swing. R. L. GLADSON, HE 7-7836

TV, 16" Crosley table model, $35. LAWN MOWER, grass catcher, $6. W. SPONSLER, FR 5-8536. A

RACING CHASSIS, ¾ midget, ¾ h.p. Briggs & Stratton engine, needs body shell, $50. RICHARD A. HULME, FR 5-5604. A

BABY CRIB, ¾ size, mattress, $15. TO 2-1291, between 5-9 p.m. A

PUPS, Dachshund AKC, $50; BOX SPRING & MATTRESS, $20; CHANDELIER. 5 unit, glass chimney type, $10. AL HERRING, OS 5-4994. A

HUDSON, 1949 Super 6 club, $195. BILL COUGHENOUR, FR 9-1315. A

CHEVROLET 1937, $69 cash. C. W. MAXFIELD, AX 4-7304. A

FORD RADIO, 1941, $10. OS 5-1847 (after 4 p.m.) A

AIR RIFLE; German LUGER; BICYCLE, boy's 24", lightweight. PL 2-9597. A

OLDSMOBILE, 1953 Super 88 Holiday coupe, $1575 or offer. BOB STEINBECK, PL 7-1605. A

BEDROOM SET, twin, cherry wood Provincial, 8 piece, 1½ yrs. old, $400. GEORGA SMITH, DA 4-7786, after 4 p.m. A

TYPEWRITER, L. C. Smith. Typesetter, $20. PERRY OLMSTEAD, OR 1-1397. A

LIVING ROOM SET, gray frieze; Super Rest MATTRESS and BOX SPRING. HENRY J. MAREK, FR. 9-2985. A

GATE, single, for chain link fence, 4' high, 29" wide. Fits 33" opening, $6. OS 6-9637. A

HOLLYWOOD BED, Sealy box springs, innerspring mattress, $50; Never used, Inavent kitchen EXHAUST FAN, $15. OR 2-7679. A

ROLLAWAY BED, single, coil innerspring mattress. Maple Jenny Lind TWIN BED, springs, mattress; Firestone TIRES 600:16, used 1 mo., DA 4-8935. A

DEEP FREEZE, 21 cu. ft. chest type 2 dr., 200 lb. quick freeze unit, $250. OS 5-1566. A

DINING ROOM SET, maple, 6 chairs, buffet, ext. table, $60. R. G. THURSTON, PL 4-8365. A

REFRIGERATOR, Westinghouse, 5½ cu. feet, 19 years old, $15. DOTTY KLEIN, KEystone 5-7946. A

SKI BOAT, crackerbox, near new, full race Merc. engine. DA 9-4927. A

HOUSE, 2 bedroom, furnished or unfurnished, New Lakewood, w/w carpet all rooms, block fence, $66 month includes everything. GA 1-7362. A

REFRIGERATOR, 10 cu. ft. Hotpoint, 1949 model, $65. J. C. COOPER, VE 8-1355. A

TRUNK KIT, electric, $3; SHOOTING BOOKS: Fast & Fancy Shooting, $2; Textbook of Firearms, Investigation & Evidence, one volume; Textbook of Pistols & Revolvers, $3. Box 2412. A

WEDDING RING SET, diamond, paid $300, $200. FR 2-2769. A

FREEZER, 18 cu. ft. International Harvester, chest type, 1955 model, $325. JANNIE L. CRAWFORD, Box 2411. A

ARCHERY HUNTING OUTFIT, 60 lb. bow, quiver, hunting and target arrows, extras, $40. W. F. WOODY, OS 6-5787.

CHEVROLET, 1947 Stylemaster, 2-door. JUDITH ANDERSON, OR 2-4743 (5 to 10 p.m. weekdays, all day weekends) A

HOUSE, 2 bedroom, rear living room, patio, fenced, 4½% loan, $56.87 month, $10,500, $3700 cash or $1050 down to qualified Vet. DA 4-5540. A

MERCURY, 1950 convertible, overdrive, W. E. THOMPSON, OS 6-3707. A

AIR COOLER, car, used very little, $5. JIM DRIVER, OS 5-3901. A

HOUSE, 3 bedroom and den, 1 year old, near Northrop. PL 6-5784. A

REAR AXLE ASSEMBLIES, 2, never used, 1955 DeSoto Firedome complete, gear ratio 3.73-1 and 3.90-1, fit some Dodges and Plymouths, $100 each. VERNARD MORSE, Box 2410. A

FOR SALE

MERCURY, 1956 Monterey, all pwr. equip., $2675. C. A. HARRISON, PL 4-0739. A

HOUSES, 3 on 1 lot, Inglewood Ave., sidewalks, curbs OS 5-4054. A

PROJECTOR, Novex 35 MM, convertible to 7x7, $25; CAMERA, Eastman Kodak 3.5, $35; CAMERA, Super Elkonta B. Zeiss Compur F:2.8, range finder, flash, $80. Box 2409. A

BENCH SAW, 8", ¾ hp motor mounted on bench; large CONTRACTOR WHEELBARROW. LUCKY DUNCAN, Box 2408.

WILLYS, 1941 coupe, $75. JACQUE GREEN, DA 4-0353. A

FORD CONVERTIBLE, 1947, $110. E. V. VENEZIA, LA 2-1461 or OR 8-2484. A

SOFA & CHAIR, near new slip cover; TIER TABLE; COFFEE TABLE, all or part, $45. BILL FRANKUM, FR 9-1309. A

MERCURY, 1956 Hardtop coupe, $2450. R. LOVECE, Box 2406. A

TROMBONE, slide, made by Conn, $50. GEORGE W. SCHMITT, DA 9-5364. A

CHEVROLET, 1950 Bel Air, best offer. DOROTHY CORCORAN, OR 8-8891. A

PLYMOUTH, 1946 4-door, $50. A. REIDT, PL 5-7411. A

CHILDREN'S FURNITURE, hardwood table and 2 chairs, $10; two school desks, $10 each. ELSIE BUNDY, FR 2-1741, after 5 p.m. A

GAS RANGE, Firestone 36", $30. FRANK M. ADAMS, Box 2403. A

BABY CRIB complete, never used, Cost $34, sell $18. E. J. DANIELS, OR 2-8955.

BUICK, 1947 convertible. $85. LA VERNE JACOBS, FR 2-9558. A

MATTRESS, extra length super bodyguard Englander, box springs, pad and bedspread inc, $25. R. A. BARBER, DA 4-6216. A

BICYCLE, boy's 16" $10. W. H. COVERT, GA 3-1363. A

SEWING MACHINE, portable Singer, $20. L. A. ADAMS, DA 4-0649. A

FREEZER, Kelvinator 6' chest type, offer. JOYCE PRENGER, OS 6-6426. A

GUITAR, Hawaiian electric, with instruction book, $35. WAYNE HILTON, FR 2-8605. A

CHEVROLET, 1941 4-door sedan, offer. FA 1-0505. A

SPINNING REEL No. 1 Luxor, extra spool, $20. JEROME G. HARKEY, LU 2-2497. A

CRIB MATTRESS, innerspring, $10; child's FOLDA-STROLLER, sunshade, $7; Revere WATER SOFTENER, full size, $40. OS 6-2597. A

PLYMOUTH, 1952 coupe, best offer, R. CLARK, PL 8-9569. A

DINING TABLE, blonde drop-leaf, 6 chairs, $65; blonde 16" T.V. console, $45; blonde END TABLES, CORNER TABLE; COFFEE TABLE, offer; LAMPS; 2 OCCASIONAL CHAIRS, 9x12 grey Axminster RUG, 2 pads, offer. DA 4-8177.

ARM CHAIRS, 2 blue upholstered, $25; Hepplewhite TEA TABLE, $15; American BUTTERFLY TABLE, $20; blue BEDROOM SET, bed, 2 chests of drawers, lamp table, rocker, mirror, $25. NO 1-3840. A

RESTAURANT EQUIPMENT, 40 cu. ft. refrigerator, 21" counter, 11 stools, soda fountain and compressor, cast iron grill, cash register, deep fryer, hood 6'x13'. OS 6-2441. A

TIRES, 4 Goodyear tubeless Supercushion deluxe 6.70-15, $15 each. E. C. BINGE, FR 5-7810. A

HOUSE, 3 bedroom, attached garage, fenced, near schools, beach, Southwest Torrance, $11,300, $3000 down. W. R. WATKINS, FR 5-2439. A

RECORD COLLECTION, over 800 75 RPM records, some collector's items, $100 for all. JAckson 7-5368. A

WASHER, 1953 ABC-O-Matic, $50. T. H. DOLL, PL 6-0116. A

COOLER, Zip-Air, used one season, has pump, cost $65, $25. J. F. PARIS, TO 4-8222. A

TRAILER, 7'x5'x2½', all steel; LAWNMOWER. B. F. PRIEST, FR 9-4388, after 5 p.m. A

SKIFF, 12' plywood, 5 hp. outboard motor, cover, complete, $125. L. L. UNMACK, GA 9-7879. A

PLYMOUTH, blue 1951 2-door, excellent condition inside and out, good tires, radio, $475. MAJ. P. S. HARRINGTON, EX 4-5875 or OR 8-2484. A

UPRIGHT PIANO, $75; Blackstone AUTOMATIC WASHER, 1954 model, $125. D. READ, OR 2-1059. A

FURNITURE, maple youth bed, $15; maple sofa-bed (Grandma Moses print), $45; Bendix automatic washer, 1953 model, $25; baby's bedroom set, chest and crib, $35; oak chest of drawers, $10. EMpire 2-5174. A

HOUSE, near Northrop, 2-bedroom, double garage, newly decorated, make offer, must sell, might rent. OS 6-5071.

HOUSE, immediate possession, 119th Pl., 3-bedroom, 16x20 rumpus room, 1¾ baths, walled yard. OR 1-0452, before 6. A

FOR SALE

BUNK BEDS, 2 wooden frame, including mattresses; ROLLAWAY BED, mattress; double cotton MATTRESS; Philco console RADIO; expanded metal IRONING BOARD, pad. OS 6-9637. A

WATER SKIS, adult Evenride, 5½". BESS PHILLIPS, EA 2-2657. A

TAPE PLAYER, Viking "Stereophonic" FF75, nearly new, $100; Bell binaural 30 watt AMPLIFIER, stereophonic high fidelity, $120. LO 6-1798. A

PONTIAC, 1955 (870) 2-door hardtop, power brakes, $2050. ELSA BODE, GL 4-3685. A

REFRIGERATOR, 9'. $59; AUTOMATIC WASHER, ABC, $69. DA 9-7079. A

VENDING MACHINES, 28 penny bulk, 14 stands. DI 2-5888. A

FREEZER, Philco, 1950, 5 cu. ft., gas, make offer. W. F. WOODY, OS 6-5787.

SPINET PIANO, Baldwin Acrosonic, maple, 18 months old, unmarred, $600, terms. F. A. RICHARDSON, FR 4-1889.

SAW, Shopmaster, 7" blade, ¾ hp. motor, $65; 2 folding LAWN CHAIRS, mattress, $6 each. OR 4-4032. A

MOVIE PROJECTOR, 16mm sound Kodak Pageant model 1, $250. R. H. ASHLEY, Box 2415. A

TRAILER, 1-wheel, 4'x4', all steel, hitches, $45. S. OKADA, RE 2-9259.

ANTIQUES, inside shutters, old, $1.50 panel; carved walnut chair, upholstered; wing chair; coffee mill lamp; pair black iron bracket lamps milk glass shades. Double box SPRING and MATTRESS; mahogany NITE TABLE. FR 2-3893. A

AIRCRAFT ENGINE, Morton M5, 5 cyl. radial model, coil, condenser, mounts, wooden prop. $125. FA 8-0028. A

CARBURETOR, Carter 4-barrel, never used, $45, for Dodge, Plymouth V-8, etc. R. K. ANDERSON, JR., HE 6-8443.

TRACTOR, child's, original price $33, $12.50. WILLIAM O. BROOKS, OR 1-8342. A

STOVE, Magic Chef, $30. FRontier 5-0743. A

BUICK, 1955 Century Riviera, full power, best offer for equity, owe $1300. JACK A. OGDEN, NE 1-2588. A

RANGE, 4-burner, table top. $25. C. A. BROOKS, FR 2-7744. A

PONTIAC, 1935, original throughout, $95 or best cash offer. ED FIORITO, OR 8-8766. A

VIOLIN, ¾ size, 1 month old; Plymouth 1951 rebuilt GENERATOR, $6. OR 7-9609, Apt. A, 4 p.m. to 5 p.m. A

BOAT, 14' Birchcraft deluxe runabout, 25 hp. Johnson motor, trailer, all accessories, $750. H. D. BOWERS, DA 4-3327. A

MOVIE CAMERA, 16mm Bell & Howell, F:2.5 lens, $90. MARTIN F. KENNETT, Box 2413. A

LAND, ½ acre. 100'x200', two 100 year old oak trees, road both sides, Coral Canyon, Malibu. $2500 or offer. ARTHUR G. MORRIS, FR 9-0234. A

TYPEWRITER, Remington standard, $20; UKELELE, Martin tenor, $20; RING. diamond engagement, 1/3 ct., $100. H. THOMAS, OS 6-3303. A

HOUSE, 2 bedrooms, near schools, fenced, 3 years old, will GI, $1000 down. $68 month, Lawndale, $8500. OS 5-5306. A

DIAMOND RING, approx. 4/5 karat, man's, gold mounting, $325 cash. OR 2-3538, around 6 p.m. A

DRAFTING MACHINE, perspective, $5; KITCHEN RANGE, Estate, $35; HEATER, Clow, gas-steam $25; FILE, standard letter, metal, $7. PL 4-9637. A

KITCHEN SET, chrome legs, 4 yellow chairs, $20. OS 5-2331. A

BEDROOM SUITE, hand finished maple, 5 piece, plus box spring, mattress, $145. FR 9-5834, after 4:30 p.m. A

SOFA, matching CHAIR, Kroehler, dark green frieze, $60. B. E. RUNSWICK, OR 7-3514. A

GOLF SET, lady's, matched Wilson steel shaft, 4 irons, 2 woods, hardly used, offer. AL ROMAN, EX 5-8572. A

DRYER, Westinghouse, 1955, used 7 months, requires 220 volt circuit, $130. WM. R. ANDREWS, DA 6-7404. A

HOUSE, 3-bedroom, bath and one-half, carpets, drapes, FHA 4½% loan, $13,700, $4000 down to first trust deed. FR 9-3671. A

SLEEPING TRAILER; WOOD SHAPER and JIG SAW, 24" throat. "MIKE", TO 9-8937. A

MOTOR SCOOTER, 1953 Cruisaire, Sears, $125; REFRIGERATOR, $50; Thor Automagic WASHER (semiautomatic), $40; TRAILER, 82¾"x46" bed, $35; 5 WHEELS and TIRES, 5.25x5.50x17, $5. DHEIN, CA 2-6852. A

HOUSE, 2-bedroom, excellent condition, 1 mile to Northrop, large fenced yard, $9800, terms. W. J. JOST, OS 6-3294.

REFRIGERATOR, Coldspot, $35. H. W. ALLEN, OS 6-8842. A

RANGE, Frigidaire, electric, $75; Admiral REFRIGERATOR, $75; ABC O-Matic WASHING MACHINE, $75; SOFA and CHAIR, makes bed, $50; 2 mahog. STEP TABLES, $10; oval TABLE, $10; small DESK, $15; OTHER ITEMS. PL 5-6798. A

HI-FI, Capehart, cost $1300, $300, $75 records free; SUNBEAM SHAVEMASTERS, latest model, $11, older model $4. OR 1-3710. A

FOR SALE

NASH, 1950 Statesman Super, overdrive, offer over $200. JACK MONK, EA. 2-9838. A

SOFA, Hide-A-Bed, 1 year old, $60; Lawson LOUNGE CHAIR, $10; TABLES and LAMPS, $2 to $5 each. OS 6-6074, after 4 p.m. A

MOTORCYCLES, 1950 Harley, converted for flat track racing, $145; 1955 A.J.S., 30/50 scrambles, $400. L. S. ANTHONY, EA 2-0750, evenings. A

BOAT, 14' outboard, ⅜ hull, glassed bottom, licensed trailer. $200 NE 8-1780. A

HOUSE, 2-bedroom, beam ceiling, large separate hobby and playroom, fenced, near Redondo Beach, $8875; down, $2400. V. N. EVANS, FR 5-9780. A

MERCURY, 1956, take reliable old car for equity; RELAXACIZOR, used few times, $50. Box 2419. A

CHINCHILLAS, two, $5 each; CAGE, $5. OR 7-7834. A

OSCILLOSCOPE, Heath, model OL-1, $29.50. GLENN R. PIERSON, Box 2418.

BUICK, 1956 Riviera Century, $2800. G. RENIER, OS 6-9990. A

HOUSE, 2-bedroom. Hawthorne area, 60' frontage, assessments in and paid, 6 years old, fenced. JOHN F. LEE, OS 6-4851. A

PLYMOUTH, 1940, $75. SAMUELSON, HO 2-4115. A

HOUSE, 3-bedroom stucco. $75 per month, no down, costs or impounds, if buyer is eligible for GI loan, $10,500; or completely furnished, new furniture and appliances, $13,500, with payments of $100 per month. TErminal 4-7305, or TErminal 5-5108.

RECORDS, 45 r.p.m., asst'd; BICYCLE, girl's, 26", $15; LIGHT FIXTURE, dining room type, $5; PARACHUTE, silk, $5. LARRY LAUER, FR 4-4140. A

FURNITURE, sofa and chair, coffee table, tier table, cedar chest, make offer. B. FRANKUM, FR 9-1309. A

CRIB, to 6 years, blonde hardwood, mattress, plastic teething covers, $25. CHUCK HOFF, Box 2417. A

MODEL A, 1929 sport roadster, $45. ED WEBER, OR 2-5470. A

SHOTGUN, 12-gauge, full choke, like new. case, 4 boxes ammo., vest, $50. OS 5-3596. A

HOUSE TRAILER. 1956 Roadcraft, 35', completely furnished, TV, awning, $1000 equity, payments $80.85. Box 2416. A

SERVING TRAY. black lacquer Chinese, $5; Melmac unbreakable DINNERWARE, 20 pieces. $5; 1955 Buick STEERING WHEEL, $2; auto BUMPER JACK, $1.50; silver fox STOLE. $35. GR 7-1539. A

STOVE, Wedgewood, 3 years old, make offer. DA 9-1620. A

FURNITURE, 3 rooms, used 3 months, $600 equity free, take over payments or can refinance. OS 5-6245. A

WANTED TO BUY

RENAULT, condition unimportant or Renault suspension and running gear. M. W. STILLWELL, OL 2-2591. B

MAPLE FURNITURE, bedroom, must be reasonable. JIM DRIVER, OS 5-3901. B

AIRCRAFT ENGINE, 65-80 hp 2 cycle, McCulloch or equivalent type; also 42/58 PUSHER PROPELLER. R. L. GLADSON, NE 7-7836. B

COLLAPSIBLE TRAILER, Ranger, H. W. CHRISTENSEN, PL 5-6301. B

BOW, approximately 50 pounds. A. M. FITE, HEmlock 4-6339. B

SEWING MACHINE, Singer portable, reasonable. ROSEMARY MORRIS, Box 2407. B

PISTOL, Luger or P-38 (9MM) also 3.57 mag. REVOLVER. State condition and price. HENRY ARNOLD, Box 2405. B

RADIATOR GRILL, 1932 Ford, D. A. WELLS, PL 1-8816 (daytime only) B

PLAYER PIANO, any condition, just so it plays, reasonable. BETTY NELSON, PL 8-8710, after 5:15 p.m. B

MOTORCYCLE, BSA, Triumph or Matchless, 1950 or 1951, cash for good buy; SCALE, hospital type. LA 5-6027, after 6 p.m. or Saturday. B

CAR or ½ ton TRUCK, good running condition. OR 4-4032, evenings. B

FOR SALE OR TRADE

AMERICAN RIFLEMAN, 10 years, one or two missing, trade for drapery work, electric grinder, what have?. PL 4-4384.

TV-AM-FM COMBINATION console, 3-speed record changer, $75 or trade for player piano in good condition. Box 2401. M

CHEVROLET, 1954 4-dr station wagon, Powerglide, trade for 1950 & up car, good condition, or make offer. V. SEYFRIED, NE 5-3921. M

PIANO, upright Marshall & Wendell. Sell or trade for outboard motor 3-7½ hp. ROBERT H. WILSON, Box 2402. M

PONTIAC 1956 V8 2 dr., standard trans. Offer or trade for older model car prefer '52 to '54 convertible or hardtop. with auto. trans. J. OLIVER, AX 3-0853 after 4:45 p.m. M

SURF BOARD, balsa, 10', $35; big size boy's BICYCLE, $7.50, 2 extra 26" tires free, or will trade bicycle for full set Encyclopedia Britannica. OS 5-7977.

FOR SALE OR TRADE

CABIN CRUISER, 40', sleeps 9, head, galley, $1595. DAVID GLABE. FR 5-0723. M

CHINCHILLAS, young, for pets, $15 a pair. J. BRANT, OR 7-2848. M

DEEP FREEZE, 24½', upright, trade equity for smaller freezer, balance due $135 at $11 month. L. S. ANTHONY, FR 4-2181. M

TIRES, two, 8.20x15; Duncan - Phyfe chrome DINETTE SET; ¼ hp. MOTOR, 115 volt A.C.; PORTABLE RADIO; RCA 40-watt POWER AMPLIFIER; RCA cartridge-type WIRE RECORDER, accept photographic equipment in trade, or sell. DA 6-2467, evenings and weekends. M

FREE (To be given away)

KITTENS, 8 weeks old. J. E. CRANE, GArfield 1-5431. D

KITTENS, 4 weeks old; 1 all-black mother CAT. LU 1-7801. D

RENTALS OFFERED

ROOM, for lady, in Hawthorne, $5 week. Call OS 6-4508. E

APARTMENT, new 1-bedroom, unfurnished, private patio, beam ceiling, garage, $82.50 month. PL 5-8955, after 6 p.m. E

APARTMENT, Hawthorne Blvd. and 101 Highway, completely furnished, near shopping, $65 month, utilities paid. J. GARZA, FR 5-7714. E

ROOM, 2 beds, $7 week, 3 blocks from Plant 1, men only. OS 6-9567. E

APARTMENT, lower 2-bedroom, unfurnished, garage, near Century and Crenshaw, children OK, $100. EX 6-6823 or EX 9-5587. E

APARTMENT, furnished, garage, near Northrop, $65, water paid, adults only, no pets. PL 6-6174. E

SLEEPING ROOM, new, private entrance & bath, 4 blocks to Northrop. $10 week. AARON STEWART, OS 6-6696. E

COTTAGE, furnished 2 room, utilities paid, garage, near Plant 1, $50 month. RICK LAGRAND. Box 2404. E

MOUNTAIN CABIN at Crestline, sleeps 4, weekly rates. A. R. OSBORNE, FR 6-2269. E

HOUSE, 2-bedroom, one year lease, fenced, water paid, $82.50 unfurnished, $92.50 furnished. available Aug. 25. LA VERNE JACOBS. FR 2-9558. E

SLEEPING ROOM, near Northrop, private entrance, $8 week. D. AMATANGELO. OS 5-5850. E

HOUSE, 2-bedroom, furnished or unfurnished, 1 or 2 children O.K. if not destructive, utilities furnished, $65, with stove. $70 furnished, Compton. C. L. FITZJARRELL, FA 8-2433. E

ROOM AND BOARD, private home, near Northrop. $85 month. PL 6-4877. E

SLEEPING ROOM, for one, private entrance, phone in room, garage, vacant Aug. 5, near Northrop. OS 5-9613. E

SLEEPING ROOM, kitchen privileges for breakfast, lady only, $10 per week, Gardena. DA 4-3690. E

ROOM, private home, kitchen and home privileges, for working girl. North Torrance area, $12 week. GLORIA HOFIUS. FR 9-5834. E

APARTMENT, unfurnished, $60, beautiful upper front single. AX 3-8578. E

APARTMENT, new, 1-bedroom, unfurnished, 1 block from bus, near Northrop, adults, $65. ETHEL G. SIMPSON, OS 6-5425. E

HOUSE, 3-bedroom, 1½ years old, bath and one-half, fenced, double detached garage, water paid, near Northrop, Torrance, $125 month. DA 4-9622. E

HOUSE, 2 bedroom and den, 1½ baths, unfurnished, Torrance, new, large walled yard, patio, water paid, $125 month. G. E. TESCH DA 4-1636. E

APARTMENT, 1-bedroom, unfurnished, ocean view, 1 block to beach, stores, bus. Stove, refrigerator available at extra cost, Hollywood Riviera, $75 month. V. IGLESIAS, FR 5-4924. E

RENTALS WANTED

APARTMENT or HOUSE, 2 bedroom or 1 bedroom and den unfurnished, by Sept. 1, to $70, within 15 minutes of Plant II. LOIS MCGRAIL, OR 1-4585. F

CHILD CARE OFFERED

CHILD CARE, in my home, naps, hot lunches. FA 8-2504. G

CHILD CARE, 6 months to 12 years, 5 days, day or night, fenced yard, near Northrop. OS 5-3596. G

CHILD CARE, reliable mother, 1 or 2 children, 4 blocks from Northrop, fenced yard, $13 for one, $20 for two, week days. Box 2414. G

CHILD CARE WANTED

CHILD CARE, 5-day care for 14 month old boy. Transportation requested to and from E. Broadway, Hawthorne. LUCY SUTHERLAND, OS 6-7319, after 5:30 p.m. H

CHILD CARE WANTED, will give room to lady in exchange for baby sitting 5 nights a week. Box 2420. H

SPORTS

The Northrop News

BIG TIME SET FOR LENSMEN

CAMERAS AIMED AT PROS

Shutters are sizzling in NRC Camera Club ranks these days.

Day shift lens hounds are gathering tonight at 7:30 in the NRC Clubhouse Annex to compete in the season's first competition—both black and white and color entries will be judged.

In addition to the contest all members will register for entry in the Southern California Council of Camera Clubs.

Last month NRC shutterbugs participated in an S4C sponsored field trip to the Los Angeles harbor. Prime purpose of the trip was top picture taking opportunities with special additions of boating and a picnic thrown in to make it a red letter day.

The week after the L.A. Harbor trip the group trekked to the Redlands Photo Fiesta where they focused lenses on the seventy or so professional models arrayed there.

Big plans are in the offing for the Camera Clubs, according to day shift Club Commissioner Scott Budge. In addition to competing in the monthly club contests, members will be groomed via instruction during club meetings and shooting nights for competition in outside professional clubs with which the NRC clubs are affiliated.

Scott also stated, "Please remind Norcrafters that any type camera — if the photographer knows how to use it—can turn out a really professional picture. That is the purpose of the Camera Club—to teach members to get the most out of their old box Brownie or whatever it might be."

Night shift CC Comish Gene Beck highlighted the social aspects of the clubs with his announcement of the recent marriage of night shift club members Ruth Draper, Blueprint Control, and George Carpenter, Production Mock-up and Quick-Fix department.

Prime event on last month's night shift Camera Club agenda was a field trip to photograph bathing beauty models at Venice Beach.

BC Grads Net Top Safety Class Honors

A lot of official bouquets were tossed toward the NRC Boat Club by officers of the United States Coast Guard following the Club's recent Safety at Sea classes.

It is anticipated that in the wake of the current sailing season a new series of the classes, titled "Small Boat Handling and Safety at Sea", will be available for interested Norcrafters.

Top graduates of the first series of courses were: day shift Boat Club members George Fritzel, R. H. White, Karla Nelson, Paul Nelson, and Kathie Nelson.

Night shift club members Bob Mordue, Enock Norrbom, Lena Salon, and William Cooper took top spots in their group.

Key men behind the initiation of the classes for the NRC clubs were Boat Club Rear Commodores Elmer Chiodo, Harold Senter, and Ed Freitas. Ed was Boat Club Commissioner at the time the course was started.

Instructors for the classes were Earl Markham, USCG Auxiliary—who instructed the day shift group—and R. J. Boyle, USCG Auxiliary, night shift instructor.

Boat Club officers gave a special word of thanks to Northrop Chief Safety Engineer Lee Johnson, who assisted in the coordination and formation of the 10-week courses.

Final outing on the NRC Boat Club agenda for the boating season will be the forthcoming Labor Day Cruise to Catalina on September 1, 2 and 3.

OPENING DAY of the NRC Golf Open drew 96 contestants from Hawthorne facility. Waiting to tee off are, left: Jack Mannion, assistant to the vice-president and general manager; Penn Holter, assistant to the vice-president, Administration; Vice-president, Administration, C. H. Miller; Vice-president and General Manager Robert R. Miller.

TALKING it over are, left, Frank McLarney and NRC Golf Comish Lee Johnston. Frank is well known as umpire for N R C Softball leagues. In background, Keith Emberson. Scene of Open was Alondra Park.

ENTHUSIASTIC is word for Kenny Roberts, left, shown with fellow golfer Jim Conant. Ken competes in four Engineering golf leagues, substitutes on another, sometimes plays a few rounds on the weekend—!

NO TALLY TERROR for these golf stalwarts: left, Andy Titus, past NRC Golf commissioner; Ward Dennis, 1955 NRC Open tourney champion; Clyde Christofferson; Ken Owen, also former NRC Open champ. List of winners in 36-hole 2-day Open will appear in next Northrop News.

NRC Good Time Table for August

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784. All clubs meet at NRC Clubhouse unless otherwise noted.

ARCHERY (days) Nick Linardos
Meet every Wednesday beginning August 8, 7:30 p.m.

ART CLUB (days), Joe Kalina
Meet in Annex every Thursday evening, 7-10 p.m. Life class—models furnished.

BIBLE STUDY, Roy Stahl
Meet daily, Plant 1, east mezzanine conference room, 11:15 a.m.; Plant II, Mon. and Thurs., Conference Room II; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ralph Cook
Meet last Wednesday of month, 7:30 p.m. Plans now being made for Labor Day Cruise to Catalina Island facility.

BOWLING (days)
Winter leagues now forming. Entry blanks available Plt. I and III, Personnel Activities Offices.

BOWLING (nights) Garland Steiner
Leagues for winter play now forming.

BRIDGE CLUB, Tom Coates
Membership drive now on. All bridge players are welcome. Meet 2nd & 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Scott Budge
Meet in Annex 1st & 3rd Wednesdays of month, 7:30 p.m. Dark room facilities and lighting equipment available to all members.

CAMERA CLUB (nights) Gene Beck
Meet 1st & 3rd Saturday of month, 7:30 p.m.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30.

FISHING (day and night)
Register all fish for NRC awards with cards supplied by Personnel Activities.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF (days) Lee Johnston
Summer leagues now in session. NRC open playing.

GOLF (nights) Pete Lower
Summer league playing at Western Ave., Golf Club.

GUN CLUB (days), Bob Kalkofen
Meet 1st and 3rd Tuesdays of month, 7:30 p.m. Next: August 7.

MIXED CHORUS, Bill Porter
Meet every Tuesday, 7:30 p.m. Music, robes and accompanist furnished. Alto and bass voices needed for musical pageant coming soon.

MODEL CRAFT CLUB, Bill Feldt
Meet first Monday of month, 7:30 p.m. Next: August 6.

PHILATELIC CLUB, Russell French
Combined philatelic and numismatic meets 2nd and 4th Mondays, 7 p.m.

RADIO CLUB, Paul Serafin
Meet last Thursday of month in Annex, 7:30 p.m. Radio Code Class meet every Wednesday evening, 7:30 p.m.

SEA SCOUTS, Ron Arcamp
Meet every Tuesday beginning August 7, 7:30 p.m.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday evening, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights) LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKEET CLUB, George Swanner
Meet every other Saturday at Long Beach Dominguez Gun Club on Artesia Blvd., at 10:30 a.m. Next meets: August 11 and 25.

SKIN DIVING (days), Glen Combs
Meet 3rd Monday of month at 7:30 p.m.

SKIN DIVING (nights), Bob Larson
Meet 3rd Wednesday of month, 1 p.m.

SOFTBALL (days), Dave Heaps
Final weeks of league play. Plant playoffs and Black Bat Tournament last of August.

SOFTBALL (nights), Dave Carney
Final weeks of league play. Black Bat entries now open.

SPORT CAR CLUB, Bill Hanna
NRSCC hosted Gymkhana at El Camino College, August 19, 8 a.m. to 4 p.m. Open to all members of Southern California Council of Sport Cars. Regular monthly meeting held 2nd Thursday of month, 7:30 p.m.

SQUARE DANCING, Angie Allen
Meet at Swimm's Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th Sundays.

SURF FISHING (days), Ed Rodish
Meet first Tuesday of month, 7:30 p.m.

SWIMMING
Leuzinger High pool open every Wednesday and Friday until August 10. Adults only on Wednesdays—Family night on Fridays. Children must be accompanied by adult Norcrafter. Time: 4:30 p.m. to 6:15 p.m.

TOASTMASTERS (days), Doug Johnson
Meet every Thursday evening, 6:30 p.m., "The Cockatoo".

TOASTMASTERS (nights), Sam Grutsis
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING, Lee Hopkins
Winter women's and mixed leagues now forming.

KNITTING, Thelma Martin
Meet every Monday evening, 7:30 p.m. Craft Room, NRC Clubhouse.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet every Tuesday, 7:30 p.m. Scout Cabin, 135 Grevillea, Hawthorne.

SOFTBALL, Pam Thompson
Women's league in progress, Harvard Playground Tuesday evenings.

TOASTMISTRESS,
Meet in NRC Clubhouse Board Room 1st & 3rd Thursdays, 7 p.m.

KEGLERS CALLED FOR ENTRIES IN WINTER LEAGUES

Entries are now open for the NRC Winter Bowling Leagues which will start during the first part of September.

Both day and night shift leagues are being set up this month and there are still openings in almost all leagues.

Bowling sites will include the Imperial, Windsor, Inglewood, and South Bay alleys.

The first league to roll will be the Engineering Men's Handicap. They start September 5 at the South Bay Bowl.

Entry blanks are available from Personnel Activities offices, Plants I and III.

NRC SPORTS CAR GYMKHANA SET FOR AUGUST 19

A NRC Sports Car Gymkhana will be held on August 19 at El Camino College for all Norcrafters who would like to see what the family buggy or their personal hot rod will do in maneuverability tests.

Trials start at 8 a. m. to continue until 4 p. m. All types of cars are eligibile (a Model A roadster took top prize last time).

Softball Season's End Sets Stage For Black Bat Trial

The closing of the current NRC Softball season heralds the beginning of the annual NRC Black Bat tournament.

The Black Bat tourney is a free-for-all type competition open to all Norcrafter softball players whether regular softball team members or not.

The game is played with a 16-inch "fun" ball instead of the official 12-inch ball.

Games are scheduled to start on August 23. Entries are due by August 13 and may be made by calling the Personnel Activities office, extension 595.

The double elimination tourney will net winners NRC awards.

Alaskan Champs

SHARPSHOOTERS—. First Lieutenants David Riley and Max E. Ross, 66th Fighter Interceptor Squadron, shot score of 5800 out of possible 6000 to take individual honors in Alaskan Air Command Weapons Meet. Both will be on winning 10th Air Division team that will go to Yuma for USAF Weapons Meet, October this year. See story, page 1.

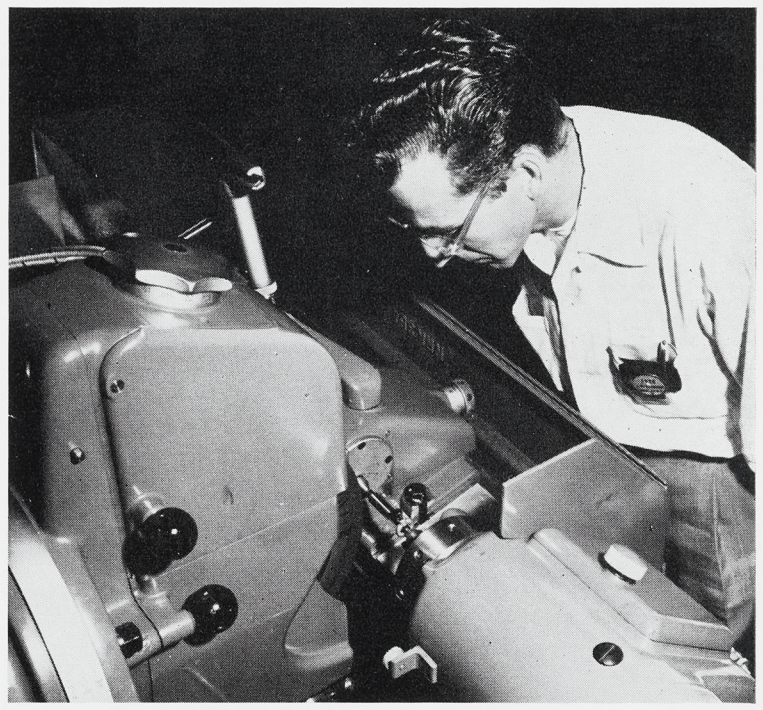
PHOTO FEATURE:

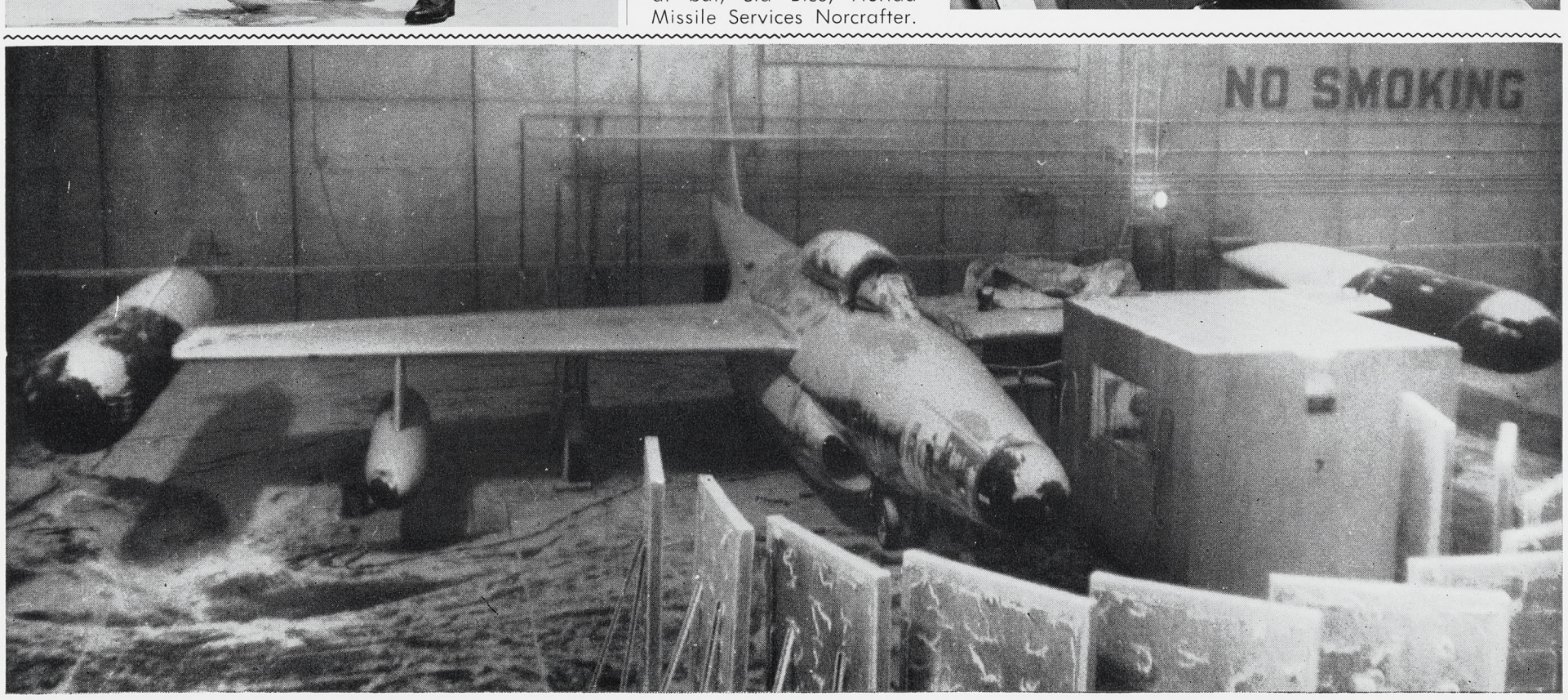
Northrop News Pictorial

ALL TECH REPS within hailing distance of Hawthorne on Fourth of July got together for rare re-union at home of Frank Mathes. Each had personal "cup" for punch, inscribed with squadron or Northrop insignia, depending on assignment. Front: Vice-president John R. Alison, Terry Razzolini, Don Thompson, Gaylord Anderson, Don Howen, Ed West, Gene Courtier, Ralph Quinn, Jim Ashby, George Sterling, and Host Frank Mathes. Center: Lee Smith, Bob Mitchell, Belvin Brigham. Back: Erv Teare, Tom Kelecy, Max Wenzl, Chuck Stevens, Rolla Finley, Doug Marine, Art Kay, Martin Hunt, Walt Kolar, Jack Gundaker, Hank Waklee, Oscar Graffious. Alaskan, Thule, Harmon bases and squadrons were heavily represented at party. Barbecue was feature.

MISSILE reliability is often dependent on extremely close tolerance work done in Plant Two on equipment like this Reishauer thread grinder, one of few in country. Leadman C. W. Brenton is checking operation on vital worm gear. Allowable error in four threads is only .00015; maximum on recent run was tight .00011!

FRIENDLY GAME—. When Norcrafters Vern Cole, Engineering Laboratories, and Dean Madsen, Engineering Test, visited Florida MTF recently for work on missile acoustics test, pals gathered around for a friendly lunch time ball game. In pic, left, Carl Lofback, Florida Technical Reports; Vern; Dean at bat; Sid Bice, Florida Missile Services Norcrafter.

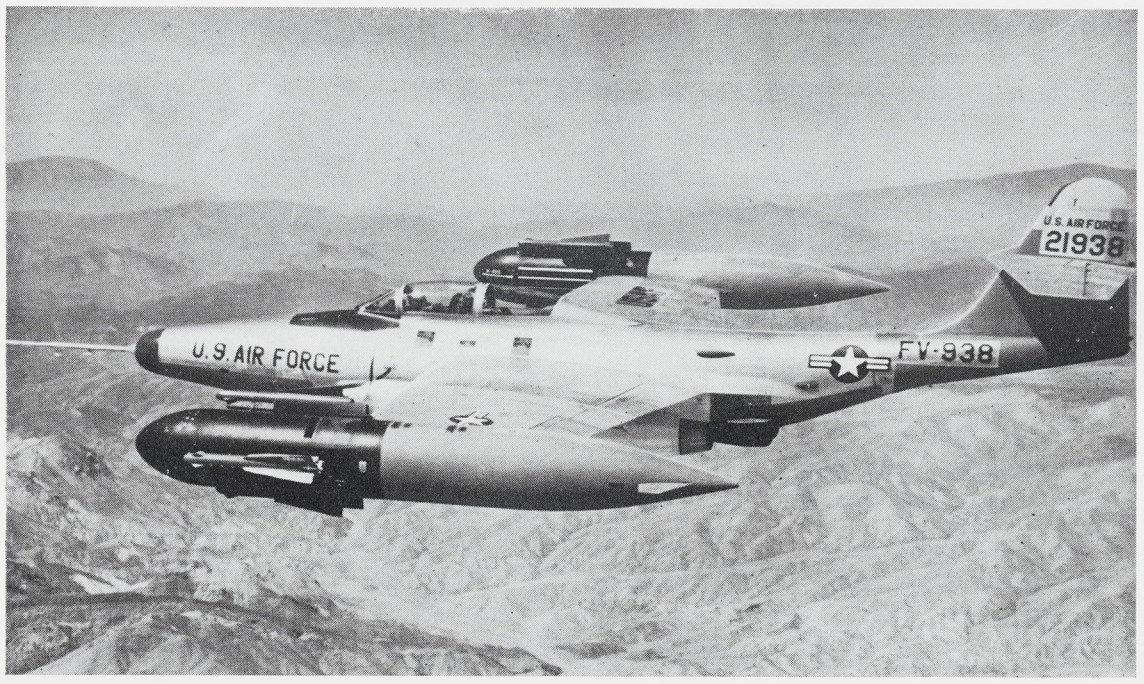




BROTHER—it's cold inside. Minus 65 degrees F. will make the teeth chatter, but Scorpion withstood the rigors at Eglin as test of a test for advanced model. Scorpion in photo "soaked" for 116 hours. When door was opened C-45 prop wash was needed to keep fog back. AF pilot taxied aircraft to near take-off speed, found it was flyable— this plus behavior of instruments, canopy, controls stamped test a success.

Northrop News

Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, August 15, 1956



SCORPION F-89H first photo released last week by the Air Force—. View shows armament—Hughes Falcon missiles— in addition to 2.75 inch rockets. Last two issues of News carried Eglin story and photos of first kill. Falcons, extended here for firing, can be launched considerably below the altitude of an attacking bomber; will climb at bullet speed; seek the target via electronic brains and strike, even though enemy be in elusive maneuvers. Falcon missiles and rockets may be fired selectively.

Northrop News Editorial

Carl Hinshaw

Aviation has lost a great friend and staunch supporter.

Representative Carl Hinshaw, who died in Washington last week, had served in Congress since 1938. During his nine consecutive terms as Representative from California's 20th Congressional District, he was distinguished for his efforts to make the United States a world leader in the air.

For his work on Capitol Hill in championing the cause of aviation, he was honored by the Air Force Association in 1948, receiving that organization's citation of honor. In 1953 the National Aeronautic Association awarded him the Wright Brothers Memorial trophy.

President Eisenhower and Vice-president Nixon paid him special tribute.

The President was quoted as saying, "His intense interest in American aviation over the years has strengthened our nation, as have his sound concepts of government."

Said Nixon, "He was a superb congressman."

Yes, Carl Hinshaw was a friend of aviation. West Coast aviation is especially in his debt. Look at the changes here.

Bean fields have given way to assembly lines. Two hundred miles per hour has given way to the speed of sound. Jet engines are commonplace. Atomic engines are just around the corner. Many thousands of us work in the industry, raise our families, are good solvent citizens.

And the future of the industry is a good one.

Carl Hinshaw was 18 years at his post in Washington.

We can pay our obligation to him by following his example—:

High principles and hard work.

NORTHROP SKY SCREEN PREVIEW AT COMPTON

FAST ACTION ON RADAR READING

The Northrop-Anaheim Sky Screen, a new radar plotting device, was demonstrated in Compton last week to military and civilian authorities interested in its potential application to the mounting problems of air traffic control.

Military and civilian experts who attended the demonstration witnessed a comparison of the Sky Screen's faster, more accurate transmission of radar data onto a viewing screen with that of the conventional transparent vertical plotting board. Both methods of plotting were used simultaneously to track aircraft in flight over the crowded air lanes of the Los Angeles basin.

The demonstration was conducted by the 148th Aircraft Control and Warning Squadron of the California Air National Guard, commanded by Lt. Col. Edmund F. Shaheen, and the Anaheim Division, builders of Sky Screen equipment.

As a unit of the California Air National Guard, the 148th AC&W Squadron is interested in increasing the rapidity of tracking aircraft and improving the portability of equipment used. The Northrop Sky Screen offers a new approach to both problems.

The demonstration was held at the 148th Aircraft Control and Warning Squadron's installation at 2320 North Parmalee Avenue, Compton.

Basically, as explained by Bob Ackerman, Anaheim Customer Relations representative who coordinated the Northrop phase of the demonstration, Sky Screen is simply a device developed for the rapid and accurate presentation of radar data. It is a component of an entire system initially conceived for the Tactical Air Command. Typically, three Sky Screens make up a display. The first unit presents local radar data, while the remaining two present data gathered by remote radar.

The Sky Screen, according to Ackerman, relays radar data as follows:

Sky Screen operator, observing a radar image or "blip" on the Sky Screen plotting surface, places a plotting marker on the "blip". Image of the marker, which is brightly identified in color and by code number, is in turn instantaneously projected onto a surveillance screen ob-

(See *SKY SCREEN*, Page 2)

Treasury OKs Retirement Amendments

Approval has been received from the United States Treasury Department and the Department of the Air Force for liberalized amendments to the Northrop Retirement Plan, Norcrafters learned this week.

Action to obtain these approvals was initiated during November, 1955 and January, 1956. Norcrafters were informed of this action and the proposed amendments in a story which appeared in the December 7, 1955 issue of the Northrop News.

The text of amendments to the Retirement Plan is on page 2.

Engineering Streamlines Salary Plan

A new, up-to-date classification and salary plan has been initiated in the Engineering division, it has been announced.

Affecting most technical people in the division—roughly three-quarters of the total—the plan provides a consistent pattern of advancement for engineers, and corresponds with engineering

(See *ENGINEERING*, Page 2)

Roth, Macdonnell Voted Officerships by Board

The election by the Board of Directors of Irving Roth and J. Grant Macdonnell to positions as officers of the company was announced last week by Northrop President Whitley C. Collins.

Roth, who previously was staff assistant to the president, was elected assistant to the president.

ROTH

Macdonnell, formerly assistant to the president, is now assistant treasurer.

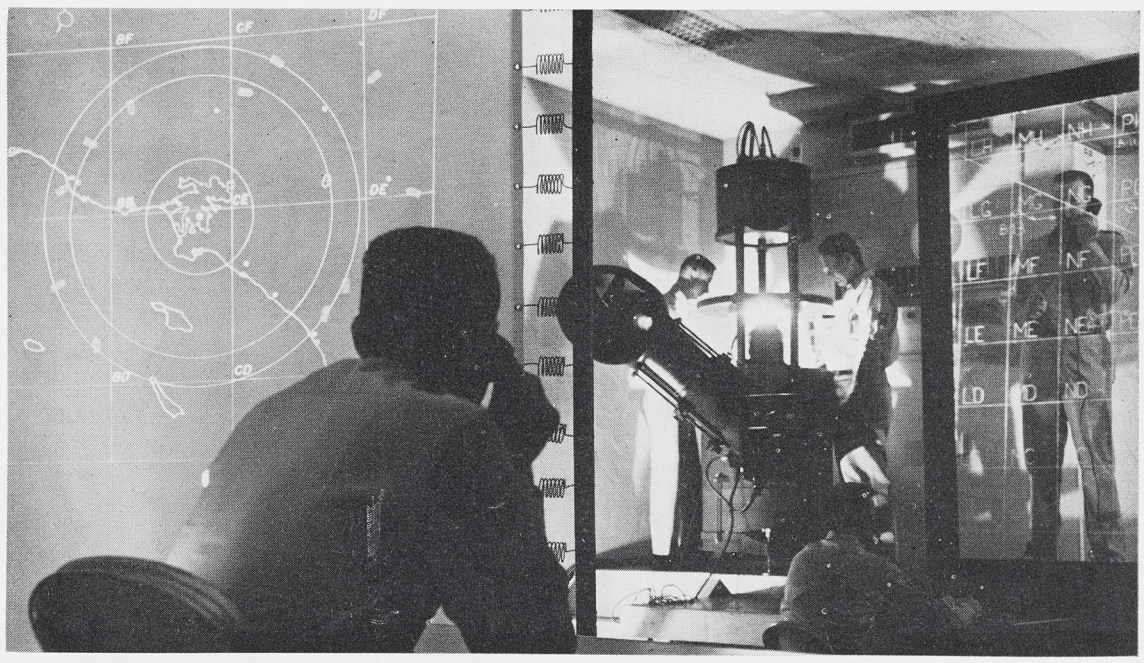
Both appointments were effective on August 9.

Roth joined Northrop in February of this year. Prior to his association with Northrop he was assistant director of budget for aviation and guided missiles in the office of the Secretary of Defense.

Macdonnell has been with the company for over 13 years. He served as budget administrator prior to his appointment by Collins as assistant to the president in February of this year.

MACDONNELL

A native Pasadenan, Macdondell held positions with the National Trust Company, Ltd., in Canada, and with the First Trust and Savings Bank, Pasadena, before coming to Northrop in 1942 as supervisor, Accounting.



THE NEW AND THE OLD in aircraft tracking were demonstrated to military and civilian air traffic control authorities by the 148th Aircraft Control and Warning Squadron at Compton. The Northrop Sky Screen (center background) is being used to project the position of radar-detected aircraft on the screen at left. The conventional vertical plotting board is demonstrated at right. The new method proved faster and more accurate in the Compton demonstration. Northrop-Anaheim division makes Sky Screens for the Air Force and Navy. See Sky Screen story at left.

Nightside Tour

Air Force Secretary in Call for Strong Forces

Requirements of national security for an attitude of constant readiness impose difficulties and hardships upon all citizens, Secretary of the Air Force Donald A. Quarles told a Minneapolis audience two weeks ago, but "time runs in favor of the way of life we stand for".

The Secretary made his remarks at a "Public Recognition Night and Banquet" sponsored by the Minneapolis Junior Chamber of Commerce to compliment the 475th Fighter Group.

"For the first time in our history," he said, "we must accept and actively support strong military forces, not to wage war but to deter war."

The Secretary listed some of the difficulties which accompany the constant alert: jet noise, crowded airfields located in populated civilian communities, retention of critically-needed skills in the military services.

"The problem of operating from airfields surrounded by a civilian community is one that aviation leaders frankly did not anticipate at the time the fields were established," Secretary Quarles stated. "Airfields were located well out from civilian communities, only to have the communities grow out to surround them."

He explained that as the Air Force builds new bases it is trying to secure perimeter and air access rights to avoid operating over heavy concentrations of population.

Jet noise, he admitted, is annoying, but he added:

"The power and speed a jet engine generates means the difference between intercepting an enemy bomber or watching helplessly as it passes overhead to deliver its devastating bomb load."

Jet aircraft are inherently safer than propeller-driven aircraft, the Secretary pointed out, and he added that the Air Force gives safety a priority second only to the performance of its combat mission.

Quarles presented all-weather jet fighter "crew of the year" awards to three members of the Scorpion-equipped 432nd Fighter Interceptor Squadron.

Captain Timothy J. Cronin, pilot; First Lieutenant Henry G. Gerling, RO; and Staff Sergeant Graydon K. Garlough, crew chief, were the personnel honored. They were awarded Commander's models of F-89 Scorpions, suitably inscribed.

Joyce Rogers' Essay Favored For Mrs. Navy

Being a dutiful wife may pay off in national honors for Joyce Rogers, Public Relations Department.

Joyce's husband Charles, U.S. Navy, wrote her from Japan informing her that he had entered her name in the current Mrs. U.S. Navy contest. Joyce who had never entered any kind of contest in her life before, dutifully wrote the required essay on "Why I Am Proud to Be a Navy Wife" and forwarded it to her spouse.

Shortly thereafter, Joyce received an official letter from the Executive Director of the Fleet Reserve Association congratulating her on being selected as a semi-finalist in the Mrs. U.S. Navy contest.

One semi-finalist from each of the 30 naval commands ashore and afloat throughout the world will be selected to compete in a 10-day contest event at Long Beach starting September 6.

The top winner, a wife of a Navy enlisted man, will be chosen on the basis of what she has contributed to her husband's desire to make the Navy his career.

The contest is sponsored by the Fleet Reserve Association composed of 50,000 career enlisted men in the Navy and Marine Corps with at least six years of service. Its purpose is to aid the Navy in its recruitment program.

The finalists will receive a number of prizes, while Mrs. U.S. Navy will also get a 1956 automobile, plus a tour of 14 mainland cities and Honolulu, accompanied by her husband and children.

Joyce and Charles have two boys, Steve, age 5, and Mike, age 7.

Advertising Hi Award To Northrop

Northrop's magazine advertising campaign was subject of a recent second place award for "Notable Achievement in Magazine Advertising", it has been announced.

The award was presented by the Advertising Association of the West in cooperation with Magazine Advertising Bureau, Inc.

In a letter to Public Relations Director A. V. Cline announcing the win, John R. West of West-Marquis, Inc., stated, ". . . Northrop was the only airframe manufacturer that reached the finals, and the campaign was bracketed on either side by Kaiser Aluminum, Gladding - McBean, and Southern Pacific."

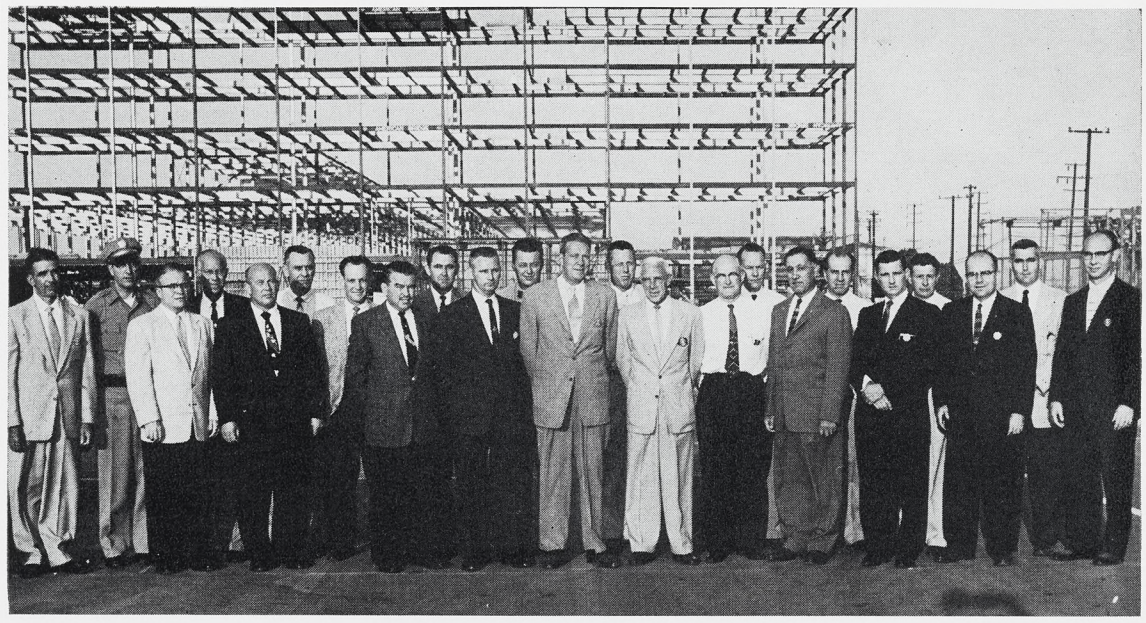
A prize money check for $100, which went to West-Marquis, Inc., advertising agency who placed the advertising, was tendered to Northrop President Whitney C. Collins as a gift to NOR-AID, the Northrop sponsored in-plant charity.

Sky Screen

(Continued from page 1)

served by the commander. A map or grid of the area covered is also projected onto the surveillance screen. A single Sky Screen operator is capable of tracking many aircraft simultaneously. A single Sky Screen, in turn, can accommodate as many as four operators at a time, thus enabling the commander, at any given moment, to have at his fingertips the almost exact location of all flying aircraft being tracked.

Both the Air Force and the Navy are already users of Sky Screen.



NIGHT TOUR—. C. H. Miller, vice-president, Administration, visits with night shift key supervision; tours production areas. Posing in front of rapidly rising Engineering science center, from left; Herman Crawford, Lt. Thornton, Jack Callahan, Hal Taylor, Len Haueter, Lee Rondot, Earle Nickles, Bill Boyes, Tom Duddleston, Harvey Cook, Stan Collins, Vice-President Miller, Forest Gordon, Tom Chittenden, Hap Frank, John Foote, John Breneman — assistant factory manager, nights; Chuck Zeller, Scotty McKenzie— Industrial Relations manager, nights; Woody Jones, Dan O'Halloran, Jerry Gartland, and Fred Griffin. Vice-president had supper with group, reported in detail on functions of Administration.

Engineering

(Continued from page 1)

personnel requirements elsewhere in the aircraft industry.

Simplification keynotes the change. The new structure eliminates 26 specific engineering classifications, replacing them with four general categories: Associate Engineer, Engineer, Senior Engineer, and Engineering Specialist.

In commenting, Ed Schmued, vice-president, Engineering, said that, "Former classification structures have become unwieldy because so many specialties have been introduced into the field."

"This simplified system," he continued, "will more equitably recognize equal skills, experience, and education, and, further, recognize the equal importance of many jobs in different specialty fields.

The 26 classifications obsoleted by the new plan were: Design Specialist, Preliminary Design Engineer, Preliminary Designer, Staff Engineer, Aerodynamic Engineer, Design Weight Engineer, Dynamics Engineer, Engineering Designer A.

Flight Test Engineer A, Research Engineer, Structures Engineer, Thermodynamics Engineer, Aerodynamicist A, Dynamicist A, Engineering Designer B, Flight Test Analyst A, Instrumentation Engineer.

Research Analyst A, Stress Engineer, Thermodynamicist A, Weight Control Engineer A, Aerodynamicist B, Dynamicist B, Stress Analyst A, Thermodynamics Analyst A, and Assistant Engineer.

TEXT OF AMENDMENTS TO RETIREMENT PLAN

Increase in Amount of Retirement Benefits

"For each full month as a participant subsequent to 31 July 1952 and prior to 1 August 1955 or his Normal Retirement Date, which ever first occurs, a Participant shall be entitled to an annual amount of future service retirement income equal to the total obtained by adding $1.00 to 1 and ¼ per cent of the Participant's Compensation in excess of $300 during that month. For each full month as a Participant subsequent to 31 July 1955 and prior to his Normal Retirement Date a Participant shall be entitled to an annual amount of future service retirement income equal to the total obtained by adding $1.75 to 1 and ½ per cent of the Participant's compensation in excess of $350 during that month. 'Full month' means 15 or more calendar days of Continuous Service in a calendar month.

Liberalization of Vesting Provisions

"1. If the employment of any Participant shall be terminated for any reason other than death after he shall attain age 45 and shall have completed at least 10 years of Continuous Service but prior to his Normal Retirement Date, such Participant shall be entitled to receive a deferred retirement income, commencing at his Normal Retirement Date, consisting of the applicable percentage, as set forth in Paragraph 2 of this Article 5, of the retirement income accrued for Continuous Service rendered up to the time of such termination of employment.

"2. The percentages of vesting which shall be applicable for purposes of Paragraph 1 of this Article 5 are as follows:

Age Attained	Years of Continuous Service	Percentage of Vesting
45	10	50
46	11	60
47	12	70
48	13	80
49	14	90
50 or above	15 or above	100

"The applicable percentage of vesting is the highest percentage as to which both age and Continuous Service requirements have been attained. As an example: a 50 year old Participant with 11 years of Continuous Service is entitled to a 60% vesting.

"3. Any person entitled to a deferred retirement income under the preceding paragraphs of this Article 5 shall apply to the Company in writing, not earlier than 3 months before his Normal Retirement Date nor later than 6 months thereafter, for the payment of such income giving the address to which the payments shall be sent. Failure to so apply shall cause a forfeit of all rights under this article 5.

New Requirement of at Least Five Years of Service to be Eligible for Benefits

"Each employee hired subsequent to 1 August 1952 and prior to 18 November 1955 shall be eligible to become a Participant on the first day of employment as an Employee provided he has not passed his 64th birthday. Each employee hired subsequent to 17 November 1955 shall be eligible to become a Participant on the first day of employment as an Employee provided he has not passed his 60th birthday, but shall not become entitled to receive any retirement income or optional benefits unless he completes a minimum of 5 years of Continuous Service."

Northrop News

Vol. 14 Northrop Field, Hawthorne, Calif. No. 25

Published every other Wednesday
PUBLIC RELATIONS, NORTHROP AIRCRAFT, INC.
A. V. CLINE, Director

CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

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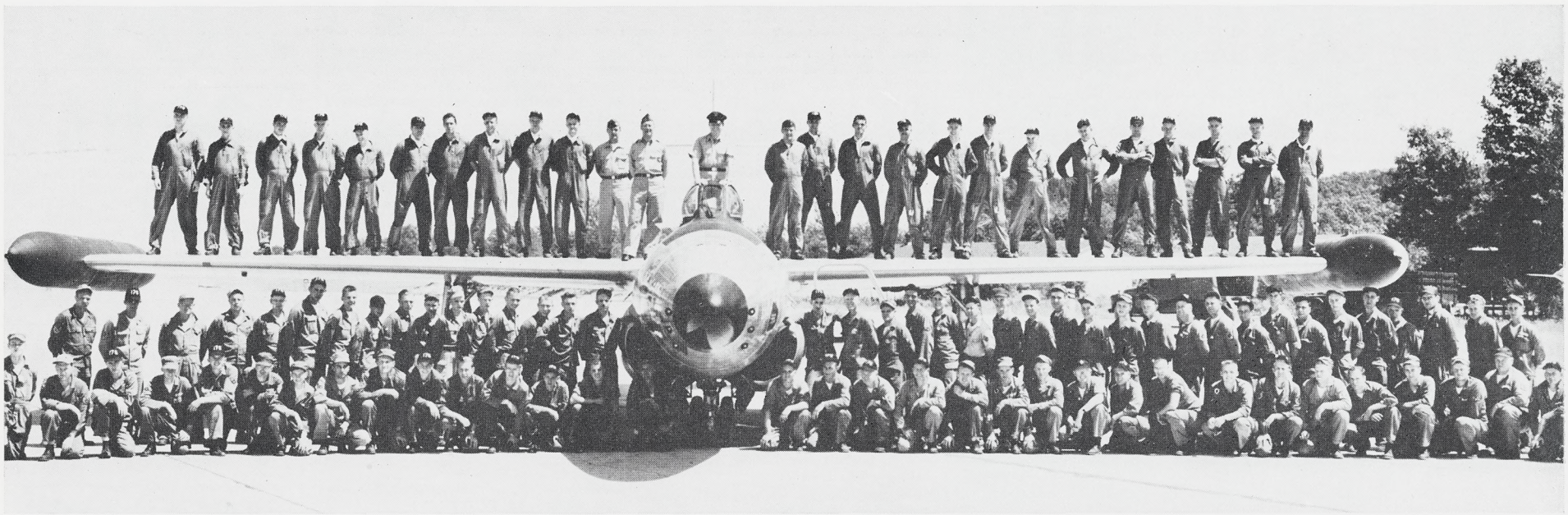

OFFICERS AND MEN of the 176th Fighter Interceptor Squadron, Air National Guard—Camp Williams, Wisconsin, pose proudly with one of their all-weather babies. Norcrafters Bob Love, pilot, Military Relations, and Paul Wheeler, photographer, Photo Lab, made recent Scorpion Camp Williams OPINDOC tour. Finer points of F-89 driving, good photos, far away factory handshake, served to cement goodwill, aid Scorpion savvy.

WHEELER triggered spectacular over Wisconsin's parklands. Three Scorpion aircraft spooking toward clouds are from 126th FIS. One feature of visit was PA broadcast from Love as he piloted '89 through maneuvers including one-engine go-arounds over Camp Williams. Bob briefed all squadrons, showed movies of Northrop airplanes. Encampment was summer tour for 128th Air Defense Wing, CO Col. S. M. Levenson. (See Northrop News, August 1.)

BOB LOVE, caught by candid, illustrates Scorpion behavior to 128th Wing officers — Major P. B. Dowd, Captain V. S. Brokow, and Major R. E. Mielke. Northrop Tech Rep Stanley Gerowski, attached to 126th FIS, and Second Lieutenant E. H. Frank, 126th FIS are in rear. OPINDOC trip took five days. Another to Michigan is planned next week. Other Wings also on schedule.

"Going My Way" forms are available from department clerks at all Northrop facilities, from PA offices, the Personnel department, Industrial Relations offices, lobbies, and the Northrop News Office.

Deadline is Wednesday noon before publication.

RIDES OFFERED

7:00 a.m. — 3:45 p.m.

(Zone 4)
FULLERTON AREA, Norco. (From Fullerton, Buena Park, Rosecrans Ave. to Plant exit.) T. A. STACKS (5508-19747, Ext. 2755). 12-4

(Zone 5)
LINCOLN & MAGNOLIA, Anaheim. (Plant 2, 3 or 4 riders or drivers, car pool considered.) H. A. STERN (5421-43660, Ext. 1619), JA 7-6726. 12-5

7:30 a.m. — 4:15 p.m.

(Zone 9)
HAWTHORNE BLVD. & HALISON OR 199TH, Torrance. (Car pool desired.) W. E. FLANAGAN (3551-13248, Ext. 565, 566, 2441). 13-9

PALOS VERDES WEST & YARMOUTH RD., Palos Verdes Estates. (Car pool or take riders.) DAVID MANGURIAN (3460-43473, Ext. 2655), FR 5-5139. 13-9

3:45 p.m. — 12:15 a.m.

(Zone 1)
HOOVER & PICO, Los Angeles 5. (Can route myself by either Hoover, Vermont, Western, separately or all.) ROBERT W. CLARK (7360-27046, Ext. 1891). 16-1

(Zone 13)
SEPULVEDA & SHERMAN WAY, Van Nuys. (Route: Sepulveda to Centinela, La Brea, Century, Crenshaw to Plant 3. Can use other routes.) EMIL STRASSER (5515-20832, Ext. 1825), ST 6-1414. 16-13

4:45 p.m. — 1:15 a.m.

(Zone 3)
PACIFIC BLVD. & SLAUSON AVE., Huntington Park. GEO. J. PATTERSON (5503-18627, Ext. 2681). LUdlow 7-7339. 18-3

(Zone 13)
SAWTELLE & SEPULVEDA, Culver City. (Will pick up anywhere within reasonable distance.) ARTHUR WEISS (5621-40670, Ext. 2208). 18-13

Miscellaneous — (Split Shift)

CRENSHAW & 101ST, Torrance. (Car pool considered, Mariposa. Hours: 7:15 a.m. to 4 p.m.). SHIRLEY FITZGERALD (6001-45034. Ext. 401) DA 6-3731.

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 1)
WESTERN & SLAUSON or 54th & Western, Los Angeles. BETTY J. HUMMEL (5507-13797, Ext. 526), AX 5-1514.

(Zone 4)
FIRESTONE & STUDEBAKER RD., Norwalk. VIRGIE PAPPAS (5517-20235, Ext. 527), TO 3-0837. 2-4

(Zone 5)
STUDEBAKER & WARDLOW, Long Beach. (Need ride badly.) PATRICIA McMANUS (5516-34811, Ext. 533, 2745, 1208), GA 9-7888. 2-5

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 5)
LINCOLN & MAGNOLIA, Anaheim. (Plant 2, 3 or 4 riders or drivers, car pool considered.) H. A. STERN (5421-43660, Ext. 1619), JA 7-6726. 2-5

(Zone 10)
MARINE & POINSETTIA, Manhattan Beach. (Will be moving to the above address around August 25). J. C. ROBERTS (5621-24008, Ext. 2208), OR 7-4586. 2-10

(Zone 13)
FIR & MANCHESTER, Inglewood. BONNIE L. VINCENT (5516-41139, Ext. 2745), OR 4-5554. 2-13

REGENT & LOCUST, Inglewood. (Will pay $3 for reliable ride.) NOLA McCANDLESS (1422-14471, Ext. 689), OR 7-3523. 2-13

7:30 a.m. — 4:15 p.m.

(Zone 1)
WASHINGTON & TRINITY ST., Los Angeles. SHERMAN LEW (3466-44917, Ext. 1671), RI 9-8075. 3-1

(Zone 2)
NORMANDIE & W. 60TH, Los Angeles. DON MEALY (3820-44945, Ext. 1293), PL 9-5671. 3-2

(Zone 4)
FULLERTON. (Ride or car pool.) R. A. BURGER (5152-44367, Ext. 1958), LA 6-2791. 3-4

SOUTHERN AVE. & SAN GABRIEL AVE. South Gate. (Also at intersection Tweedy Blvd. & San Gabriel Ave.) SHIRLEY A. FELIX (3820-23587, Ext. 1293), LO 6-1874. 3-4

FIGUEROA & 120th, Los Angeles 61. DEE RIVELLO (1421-12239, Ext. 691), PL 6-3818. 3-4

EASTERN AVE. & WATCHER ST., Bell Gardens. (Intersection approximately 2 miles north of Atlantic Blvd. & Firestone Blvd.) JAMES VINCENT GESUALDI (3352-44984, Ext. 2781), LU 1-6324. 3-4

(Zone 9)
HAWTHORNE BLVD. & HALISON OR 199TH, Torrance. (Car pool desired.) W. E. FLANAGAN (3551-13248, Ext. 565, 566, 2441). 3-9

EASTWOOD AVE. & 147TH ST., Lawndale. (I live halfway between Hawthorne & Prairie.) JULIE JONES (1421-39198, Ext. 691, 1655), OS 6-3926. 3-9

(Zone 10)
PHELAN LANE & REDONDO BEACH BLVD., Redondo Beach. BERYL D. SCOFIELD (9330-44996, Ext. 2228, 2229), FR 9-1385. 3-10

HAWTHORNE BLVD. & 136TH ST., Hawthorne. (Ride home only.) CAROLYN VASI (3143-12535, Ext. 454), OS 5-5201.

ANZA & 134TH, Hawthorne. (Ride urgently needed by 2 people at this same address.) HELENE BREDSTRAND (3144-12543, Ext. 466), OS 6-0030. 3-10

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 12)
SEPULVEDA & MANCHESTER, Westchester. VANGIE ROGERS (8400-27509, Ext. 1201, 1202), OR 2-9763. 3-12

SUNSET & ALMAR, Pacific Palisades. (Ride pool desired). RICHARD R. DODD (3850-45025, Ext. 2158). GL 4-2451. 3-12

(Zone 13)
CENTINELA & LA TIJERA. Los Angeles (45). MARY LOU JELINEK (3130-12348, Ext. 1555, 1556, 1557). OR 7-7475. 3-13

(Zone 14)
BEACHWOOD & FRANKLIN, Hollywood 28. KEN BOGUE (5910-17, Ext. 2614, 2660), HO 2-9098. 3-14

RIVERSIDE DRIVE & COLFAX AVE., North Hollywood. W. L. EGGLESTON (5980-22892, Ext. 2600, 636). 3-14

7:30 a.m. — 5:15 p.m.

(Zone 13)
SEPULVEDA & SAWTELLE. Culver City. (Plant 3). SY PICKER (3131-25074, Ext. 1557). EX 8-0330. 4-13

3:45 p.m. — 12:15 a.m.

(Zone 12)
SEPULVEDA & 78TH ST., Los Angeles 45. LEILA HOGAN (5351-37501, Ext. 541), OR 1-0961. 6-12

RIDES WANTED

4:45 p.m. — 1:15 a.m.

(Zone 6)
ORANGE & 4TH, Long Beach. JOSEPH A. EWING (5406-43149, Ext. 2220), HE 2-1585. 8-6

(Zone 8)
CRENSHAW & 182ND, Torrance. O. H. SANDERS (5503-18571, Ext. 2219), DA 9-4696. 8-8

(Zone 13)
JEFFERSON & HAZELTON, one block east of Sepulveda, Culver City. (To Maple Street facility.) GRACE M. CARSON (5930-19287, Ext. 3-231), VE 9-8246. 8-13

RIDES WANTED

Miscellaneous — (Split Shift)

(Zone 7)
EDGAR & 223RD or 223rd & Avalon, Torrance. (Mariposa. Hours: 7:15 a.m. to 4:15 p.m.). HELEN M. BILLINGSLEY (6001-45038, Ext. 401, 402, 405), TE 5-5383. 10-7

(Zone 8)
CRENSHAW & 101ST, Torrance. (Car pool considered, Mariposa. Hours: 7:15 a.m. to 4 p.m.). SHIRLEY FITZGERALD (6001-45034. Ext. 401). DA 6-3731.

Buy Bonds

BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

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Box numbers will be provided to Norcrafters who do not have home phones or who do not wish calls. Replies to box numbers are to be in writing. Box number replies will be forwarded by the News Office without delay.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday one week before publication.

FOR SALE

REFRIGERATOR, Servel, $50; COFFEE TABLE, mirror top, $10. MORTON F. STIEGLITZ, FR 6-1832. A

AMPLIFIER, 20 watts, matching electro-dynamic SPEAKER, $15. C. A. BIRCHFIELD, OR 1-5109. A

DODGE 1951 Wayfarer. PL 1-8170. A

SPINNING REEL Luxor #1, extra spool, Sila Flex rod, 2 oz. 8', all for $40; Simpson Roto Ranger METER, 20,000 ohms, $25. LU 2-2497 A

AUTOMATIC KNITTING MACHINE, Knit King, $100; 6 place-setting Easterling CHINAWARE (cerise-open stock pattern), $75, never used. DA 4-8989. A

MOTOR, like new, Stevens 24 V for Bolex H-16, $40. FELIX BARLOW, PL 6-6746 after 5 p.m. A

BOAT 16', trailer, 25 hp. outboard motor, complete, $375 for equity. DA 4-1389 before 3 pm. A

BOAT, 28' motor cruiser, Chrysler marine power, sleeps 4, modern, $2000. G. R. GREGOR. FR 4-3654. A

CONVERTIBLE TOP, fits 1939 Cad., Buick, or Olds. A. D. ADAMS, OS 6-1696. A

MOVIE CAMERA, Victor 16mm, Wollensak, 17mm F2.7 Velostigmat lens, case; Bell & Howell Filmo master 16mm PROJECTOR, $150 for both. PL 2-0982, after 5 p.m. A

OUTBOARD MOTOR, 3½ h.p., w/cart, $35. W. HENRICH, FR 4-5412. A

HOUSE, 2 bedroom, R-2 fenced lot, drapes, near Northrop, $11,950. OR 8-8684. A

REFRIGERATOR, Coldspot, $50. R. T. FORMAN. DA 9-5079, after 5. A

CAMP BED steel spring & mattress, offer. ROY A. BALLING, VE 9-7378. A

FURNITURE: Coldspot refrigerator, $20; apt. size O'Keefe & Merritt stove, $25; divan, $10; breakfast set, $15; dinette set, wood, $20; dresser, $10; Hollywood bed, $10; 2 leather upholstered chairs, $10 each; various other items. Girl's BICYCLE, 26", $15. EX 9-6158, 10 a.m. to 3 p.m. A

WEIMARANER, (gray ghost) 7 week male, AKC champion stock, $75. EX. 8-5084. A

MOTORCYCLE 1944 Harley Davidson "74". full dress. $200. J. R. BYRNES, Box 2502 A

BOATS 12' & 14' runabout, Fibreglassed, 2 motors, 1 water skimmer. FR 4-2190.

BABY CRIB, Baby Line, w/mattress, $20. J. J. MICHELS, PL 1-1559. A

TRAILER, 2-wheel, 4' x 8' box, extra wheel. $65. W. M. KASTENDICK, OR 4-3462. A

SEWING MACHINE, rotary, electric, mahogany, $85.50. BURT MILLIGAN, FR 9-7023. A

OLDSMOBILE 1953 Holiday "98", full power, $1695. V. TUCKER, OS 5-7987. A

SPORTSMAN COACH, fits into bed of pickup truck, sleeps 3, butane, sink with water tank, ice box, $850. OX 7-1511. A

BOAT, 17' Chris, utility outboard, ski/fishing, 6' beam, glassed, 1953 Johnson 25 hp. $650. OS 6-3319. A

CAR COOLER and desert WATER BAG, nearly new, cost $16.35, $8. HO 7-0629.

OLDSMOBILE 1949 convertible, new top, $300. J. G. ANDERSON, VE 9-9034 or WE 6-0195. A

LIFE RAFT, 9 men, $20 (rubber). FR 6-1147. A

HOUSE, 2 bedroom, convertible den, fireplace, corner lot, walled, West Westchester. OR 1-0103. A

CHROME SET. for kitchen, 5 piece red upholstered, $20. FR 5-6332. A

CADILLAC, 1947 sedan, equity free take over payment of $26 mo., bal. $340. OS 5-1847. A

AIR COOLER, portable Thermador Evaporative (can be used as fan only if desired) 10" fan, 18½" high x 13½" wide x 11" deep, front fill spout, 2 gallon. $28. Box 2501. A

BUICK, 1949 super 2-door sedan, $200. W. H. CARNEY, ED 4-1305. A

IRONER, Ironrite console, $175. PL 6-0862. A

MERCURY, 1953 hdtp., fully equipped, offer. I. C. WILLIAMS, FR 9-7877. A

BOAT, 12' sports runabout, 30 horse engine. with steering. OS 5-4298 after 5 pm or weekends. A

JEEP, 1948 Willy's. $700. KEITH McGILL, DA 6-5227 after 6:30 pm. A

RIFLE, Enfield, 30-06, Lyman sights, Monte Carlo custom stock, Winchester built, $125. L. W. CURRY, PL 6-8658 or PL 2-8316. 10 a.m. to 7:30 p.m. A

AMPLIFIERS, 2 Triad HF-10 built-in preamps with 6V6 output tubes, $35, with 6L6 output tubes, $45. DON B. WEILAND, FR. 9-5088. A

FOR SALE

BABY BED, wet-proof mattress, used 2 months, $25; PLAY PEN, $5. HELEN NEAL, DA 4-3217. A

FORD, Country sedan, 8-passenger, 1954, 1956 Thunderbird engine, $1700. E. C. BINGE, FR 5-7810. A

AMMUNITION, 300 rounds of 30-06 G. I. issue, $5 per 100. A. BAUER, CL 7-8077. A

WASHER, wringer type, automatic shut-off, 5 years old, $15. MARGARET BALDWIN, DA 4-7019. A

GARAGE DOOR, single with hardware, offer. C. A. BUCHMAN JR. FA 8-3485. A

AMPLIFIER, Gott 30 watt, preamplifier, 90-day warranty. $70. F. A. EISERLING, FR. 5-2047. A

BATHINETTE (deluxe), $10; automatic folding PLAY PEN, $15; walnut DINING ROOM TABLE, $10; Micro-16 CAMERA and FLASH ATTACHMENT, $20. OR 2-5804. before 4 p.m. A

FURNITURE: limed oak bedroom set, 5 piece, double beds; walnut dining room table, 4 chairs; radiant gas heater with thermostat, Western Holly; RCA Victor combination radio and record player, table model, sell all or part. OS 6-8457.

HOUSE TRAILER, 1954 Columbia Malibu, 35', oversize awning. $3000; TV 12½" Zenith console, $35; Thermador CAR COOLER, $8. E. RHEUARK, OS 5-9842. A

VOLKSWAGEN, 1955, $1695. H. H. LINVILLE, FR 4-0718. A

PUPS, Beagle 7 weeks old, A.K.C. registered, male $75, female $50. FR 5-5171. A

TV, 21" Majestic, mahogany, $150. TIPPY FARASH, PL 3-7484 after 5 p.m. A

SERVICE STATION, for lease, 6 pumps, inventory plus $500 for service car. PL 5-6610. A

OLDSMOBILE, 1953, 98 4-door, recent Hydra-Matic overhaul, $1450 cash. LES CURE, OS 6-9462. A

CHEVROLET, 1953 ½ ton pickup, 4-speed trans., $350 cash and take over payments. D. THOMPSON, TE 4-6097. A

BABY CAR SEAT, $4.50; TIRE, 15 x 7.60, Goodyear cushion, not recap, tube free to purchaser, $15. J. C. ORR, DA 4-0373.

MERCURY MOTOR, full race 1948, Lincoln ignition, 9 to 1 heads, $200. MARY ST. CLAIR. FR 4-2949. A

PONTIAC, 1953, 4-door, $1000. WILBERT T. FERRIS. PL 5-4114. A

SWIMMING POOL, 18' diam., 3' deep, Doughboy, water filter, $300. JOHN TOURINO, PA 1-6764. A

FURNITURE, light wood dining room set, buffet, $100; 7 cu. ft. refrigerator, $150; gas range, $40; Bendix automatic washer, needs new timer, $25; 12' x 15' and 8' x 9' carpets, $25. W. A. STEYER, PL 7-1653. A

SPRAY GUN, ¼ h.p. mounted on wheeled table, used once, $35; AIR CONDITIONER Air Tempt, $60. C. D. FULLER, EM 2-5174. A

TRAILER, 4' x 5', one wheel, load cap. ½ ton, $30. S. J. CELLINI. FR 5-0957.

HOUSE, 5 room, 2 b.r., dining room, corner lot, 2 blocks from Lennox Civic Center, can be FHA'd, $12,000. EDW. H. CRAIG. OR 7-4160. A

ENGAGEMENT RING, diamond, cost $135, $70 or offer. OS 6-5556. A

MERCURY, 1939 4-door, nosed & decked, $85. CECIL COLLIER, NE 5-0101. A

BEDROOM SET, 5 piece, less mattress & springs, blonde mahogany, twin beds, $50. R. E. HOUSE, TH 6-3404. A

TYPEWRITER, L. C. Smith Typesetter, $20. LAWRENCE HALLIBURTON, OR 1-1397. A

COCKTAIL TRAY, Chinese design, $5; Melmac unbreakable DINNERWARE, 20 pieces, $5; auto BUMPER JACK, $1.50; 1955 Buick STEERING WHEEL, $2; silver fox STOLE, $35. BARTON, GR 7-1539.

TAPE RECORDER, 2-speed, Dixie Land model of the Tri Fi Corp., 2 rolls of tape, $100. LOraine 9-5429. A

CHEVROLET, 1941, 2 door sedan, new brakes, battery, $150. JAMES R. MOYER, NE 1-4362, before 4 p.m. A

WASHING MACHINE, wringer type, $20; matched pair enameled LAUNDRY TUBS, $20; single cement LAUNDRY TUB, $5. FR 9-9369. A

WASHING MACHINE, apt. size, $35; Roper GAS RANGE, $25. IRENE BECK, OS 5-1457. A

STOVE, 36", 4 burners, griddle, $65. PHILIP TRIPOLI, Box 2508. A

CRYSTAL, Fostoria "Romance" (open stock), 37 pieces, $86; Spode imported English CHINA, "Fairy Dell", 52 pieces, pattern discontinued, $115, or both sets as package for $175. PL 6-0892. A

SLEEPING TRAILER; JOINTER-PLANER; WOOD SHAPER. MIKE, TO 9-8937. A

FOR SALE

GUNS, model 722 Remington, 300 calibre; model 98 Mauser, FN action, Redfield receiver sight. OS 6-0346, after 5:00 p.m. A

WASHER, ABC automatic, 3 years old, $50 or offer. M. A. ROJAS, Jr., CA 2-4362. A

TRAILER, camper's sleeping, butane stove, ice box, $200; 1953 Mercury FENDER SKIRTS, $3. HERBERT CHAN, OS 6-4225. A

TRIPLEX, Manhattan Beach, 2 bedrooms each, 3 garages, 2 sundecks, built 1952. FR 5-4118. A

LOCOMOTIVE & TENDER, O-gauge New York Central Niagara, hand made, $60, 150 ft. brass track extra; silver fox modern FLOOR LAMP, $20; GE rotary IRONER, used 1 month, $35; hand painted SCENE, 36"x40", $50; chrome KITCHEN SET, $25. Box 2506. A

TRAILER, 2-wheel, 5' x 8', overload springs, $35. ARNOLD BEAUDOIN, DA 9-3922. A

RANGE, Gaffers and Sattler, $55. W. R. FAUGHT, HO 7-9867. A

BEDROOM SUITE, 5-piece, 42" vanity mirror, $65. FR 9-0706. A

TRAILER, 1-wheel, all metal, $35. S. M. PREWITT, EX 5-5290. A

RUG, cotton twist floral, 10'x14', $25. OR 7-3363. A

KITCHEN STOVE, 4 burner, $35; standard letter FILE, metal, 1-drawer, $7; RADIATOR HEATER, Clow, gas-steam, $25. PL 4-9637. A

TRIPLEX, 3 blocks from ocean, Hermosa Beach, income $2460 to $2580 per year, patio, barbeque, fireplaces, garages. FR 9-9235. A

VACUUM SWEEPER; TYPEWRITER; Thor IRONER; electric baby WASHER; Duart PERMANENT WAVE MACHINE; tenor GUITAR; VIOLIN; CARPET SWEEPER. OS 6-6449. A

PONTIAC, 1951 2-door sedan, available Sept. 1, $600. PAUL HAYS, WE 3-0307.

RECEIVER, BC-348-Q, 1.6-18.0 MC, AC converted; SCR-522 TRANSMITTER-RECEIVER, 2 meter, in rack. C. T. HANNA, DA 4-3411. A

HOUSE TRAILER, 35' Roadcraft, 1956 model, furnished, including TV, awning. Box 2515. A

FISHING BOAT, 20', 60 hp. inboard engine, $700. D. C. KOLLANSE, HEmlock 5-1851. A

HOUSE, 4-bedroom, 2-bath, large den, fireplace, beam ceiling, Palos Verdes area, block wall fence, GI resale, $18,000, Torrance. Box 2510. A

BED, ¾ size Hollywood, $15. W. M. LUND, DA 9-6021. A

MOVIE CAMERA, 16mm, Revere, all lenses, carrying case, $125 cash. TOM ESTERBROOK, OS 6-8444. A

VELOCETTE, 1954, full race, $450. OR 2-4980, after 6 p.m. A

SAW, Shopmaster, 8" blade, ¾ hp. motor, $65; SUIT, man's beige Mohara lightweight, size 38-40, $10; ladies' light blue DINNER DRESS, size 12-14, $7. OR 4-4032. A

BOAT, 15½', all fiberglass Performer, 40 hp. Mercury motor, used 20 hours, front controls, trailer, $1100. OS 6-4920.

HEALTH BUILDER, Battle Creek, 2 web belts, length 48", width 19", height 44", $50. PL 6-8095. A

STUDEBAKER 1941 Champion coupe, $48; TRAILER AWNING. and frame. D. DREDGE. OR 2-7628. A

RABBITS & equipment, 11 young does, 1 buck, 4 double hutches, 3 single hutches. feed dishes, water crocks, sell lot or separately. OS 5-6377. A

PONTIAC, 1955 Starchief convertible, full power. $2395. R. D. GUY, FR 4-3135.

BOAT. 12' plywood, 10 h.p. motor, $300; WATER SKIMMER for skiing, skiis. reasonable. FR 4-2190. A

BICYCLE. 16" boy's, $10. W. H. COVERT. GA 3-1363. A

FORD V-8 club coupe, $175. H. R. HILTON. DA 4-8432. A

PLYMOUTH. 1939, $50. FR 4-3247. A

FORD, 1953 convertible, $1195. DICK DODD. GL 4-2451. A

CHINA, Noritake, La Salle pattern, 93 pc., 12-place and service pieces, still crated, must sell, $50. OR 2-1202, eves.

BUICK. 1952 Special, Riviera hard top 2-door stick shift $625 or offer. NO 4-2624. A

BEDROOM SET. solid maple, cost $1000, $300; STOVE, Wedgewood, apt. size, 1 year old, $50; STOVE, Magic Chef, 9 months old, $75; REFRIGERATOR, Coldspot, $50. DA 3-3897. A

WASHER AND DRYER. 1955 deluxe model Westinghouse, like new, both for $325. B. L. COLE. DA 9-5170. A

SLEIGH BED, antique cherry. spring, mattress. $50 or offer. OR 1-9251. A

WASHER. Maytag. square tub. wringer type. $65. LU 7-7339. A

WASHER, Maytag, wringer type, automatic pump $20; GARDEN TOOLS, including wheelbarrow & lawnmower, $15; IRONING BOARD, $1; single BED, $5. TE 5-3393. A

REFRIGERATOR. 9 cu. ft. Kelvinator, used 8 years; Hoffman console T.V.. 14". new picture tube. OS 5-6458. A

REFRIGERATOR, Coldspot; Thor WASHer; mahogany COFFEE TABLE. M. E. BLOYE. DA 4-5483. A

REFRIGERATOR. 11 cu. ft. Norge upright. late model. J. L. THURMOND, OR 4-1373. A

FOR SALE

BED, Rollaway. and mattress; RADIO, RECORD PLAYER & wire recorder combination; UNIFORM SKIRTS for Hawthorne Christian School. size 5. OS 6-9637. A

COTTAGE, 2-bedroom, Quail Valley Country Club, near Lake Elsinore. full bath, 20'x21' knotty pine rumpus room, fireplace, full price $6000. low down, easy terms. ST 0-4114. A

ENGINE. 1939 Ford. $85; TRANSMISSION, $25; lettering SPRAY GUN, $8.50; gasoline POSTHOLE DIGGER, $95. H. L. BENNETT. VE 7-4237. A

HOUSE, large 2-bedroom, paddle tennis court. 20'x40' patio, fenced, w/w carpeting. cash to new F.H.A. loan. Box 2513. A

PING-PONG TABLE. net, paddles, balls, used twice, $25. Box 2512. A

BEDROOM SET, 4-piece mahogany Drexel. double bed, $80; full size CRIB, Kantwet mattress. $25; ¾ size CRIB, mattress. $15. DA 9-5958. A

TRAILER. 1-wheel, 4'x4' all steel, $45. SHIG OKADA, RE 2-9259. A

LAWNMOWER, w/grass catcher, $5; MIXMASTER, $5. RE 5-8807. A

WANTED TO BUY

FORD, 1948 convertible or club, cash for bargain. FA 8-6523. A

VACUUM CLEANERS, Hoover and Electrolux tank cleaner. HAL PARRY, OR 1-9835. A

PARAKEET CAGE, good, large, used; set of Americana or Brittanica ENCYCLOPEDIAS, reasonable. FR 4-2190. B

BEDSTEADS, 2 maple or early American (twin sizes). HANK, PL 6-0684. B

AUTOMOBILE to be wrecked, Dodge, Plymouth, or equivalent, 1932 to 1937, need chassis and running gear. R. BRUMPTON, OS 6-5253, week days only.

TRAILER, all metal, 16 to 18 ft. with toilet & basin, will pay cash. H. F. WILLIFORD, OR 1-6594. B

RUG, grey or biege, 9' x 15'; gray chrome DINETTE SET; blonde END TABLES; COFFEE TABLES; CONTOUR CHAIR. HELEN NEAL, DA 4-3217. B

RECORD PLAYER, RCA, 45 r.p.m. CLAUDE MENKEE, Box 2511. B

FOR TRADE

RIFLE, Mossberg, .22 semi-automatic, sling, want rotary type garden tractor. R. BRUMPTON, OS 6-5253, week days only. C

OLDSMOBILE, 1953, "98" Holiday, trade equity for 1950-1951 Ford or Mercury. OS 5-1028, days. C

SHOTGUN, 12 gauge, double barrel, hammerless Higgins, shot 17 times, trade for deer rifle, any calibre. OR 2-2515. C

PLYMOUTH, 1948 4-door, want jeep, pay difference in cash; HI-FI, Lingary Williamson, 12 w., 1956 model, want sewing machine. AN 3-7620, 6-9 p.m.

FOR SALE OR TRADE

WINDOWS, 2, both double hung, 3' x 4'. glazed, sash balances. PL. 6-0684. M

HOUSE TRAILER, 1956, 40' 2 bedroom, carpeted, awning, sell equity. ROSS E. JONES. FR. 4-9394. M

RIFLE, 30-40 Winchester 1895 model, long barrel; Cadillac ENGINE, rebuilt, will install; CAR RADIOS, fit Hudson, Buick, Cad., and Pontiac; TIRES, TUBES, WHEELS, 8:20x16 4-ply, four; 2 Goodyear Eagle racing, 5.00x16; 2 Cessna 8.50x10. A. D. ADAMS, OS 6-1696. M

MERCURY, 1952 hardtop, Mercomatic, $925. ANNE LA MONTE, OS 5-7924.

PORTABLE HEATER, Kenmore electric, thermostatic control, 1320-1650 watts, used 2 weeks, $15 or trade for elec. buffer. TED ABBOT, DA 4-5824. M

WINDOW SASHES, 2 steel with copper screens, 3'x3' and 4'6"x4'6", $8 each. PL 6-0684. M

WATER SOFTENER, semi-automatic, Rheem, $375, used 1 year, will trade for piano or what have you? OS 5-6438. M

INSTRUMENT PANEL, Stewart Warner, never used, has tach., oil press., oil temp., water temp., amp., $35 or trade for drill press, jointer or band saw. TE 5-1532. M

MAGAZINES, 4 years of Popular Photography, from 1952 up to and including August 1956, also various chemicals and accessories. HO 4-7747, between 10-12 a.m. M

RUG, reversible linen, 12'x11' and pad, tan, cost $160, $34; hardwood mahog. CRIB, non-allergy mattress, $29; 14' homebuilt TRAILER, sleeps 2, has everything, $160 or will accept trans. car in trade. MAX STERN, DA 4-6748. M

DIAMOND RING, 1 1/5 carat, platinum setting, cost $875, trade for boat, cycle or etc. JIMMY GIBBS, DA 6-6893. M

COUPE, Model A, $50, or trade for tilting arbor saw. DA 3-2834. M

PONTIAC, 1938, 6 cyl. coupe, $65, or trade for small trailer. Box 2509. M

WASHER, Bendix auto., plus complete spares, $50; Bendix DRYER, $90, want gas Duo-matic; full size STOVE, $25; Servel REFRIGERATOR, cross top freezer, $150, trade both, adding cash, for auto. defrost, icemaker Servel; Sears light duty SANDER, trade for heavy duty sander. FR 5-5298, after August 18. M

FOR SALE OR TRADE

HUDSON, 1946, D.M. super 6 coupe, $65, or trade for carpeting, rugs or small trailer. H. A. STERN, JA 7-6726.

SHOPMASTER, 8" saw, ¾ hp. motor, 1941 CHEVROLET for ½ ton truck, offer. OR 4-4032. M

VIEW CAMERA, f:6.3 lens; Varicon CONTACT PRINTER; Kenmore AUTOMATIC WASHER; Duncan-Phyfe chrome DINETTE SET; NCR BOOKKEEPING MACHINE; R.C.A. 40-watt power AMPLIFIER; ¼ h.p., 115 v. MOTOR; portable RADIOS. Want reflex camera or darkroom equipment or will sell. DA 6-2467 evenings and weekends. M

RADIOS, coin operated, reasonable, or trade for bicycle parts. FA 8-6523. M

GLASS HOUSE, 9'x12', $250, or trade for postwar car. FR 4-3247. M

CAMERA, 35mm single lens reflex, complete outfit, trade for 2¼x3¼ Speed Graphic. E. B. GUNTHER OR 7-1401. M

HUDSON, 1949 "6" Commodore 4-dr., $149, cash or trade for 8mm. movie projector & splicer. HENRY ZIMA. RE 4-4600. M

FREE (To be given away)

KITTENS, Angora-Persian. A. D. ADAMS, OS 6-1696. D

KITTENS, free to good homes, gray, black, and striped. Box 2504. D

DOG, Red Boned Hound. 8 mo. old. Box 2514. D

RENTALS OFFERED

PRIVATE ROOM, outside entrance, walking distance, Plant #1. $8 week. H. R. STANLEY, OS 5-1450. E

TRAILER, 3 room modern, near Northrop. $46 month. PL 4-2570, days. E

GARAGE APARTMENT, 1 room, utilities, furnished. $35 per mo. OS 6-2621. E

ROOM, private bath, private entrance, $10 week. MARGARET BALDWIN, DA 4-7019 after 5 p.m. E

APARTMENT, new 1-bedroom, unfurnished, garage, near Plant 3, $80 month. K. KALUNIAN, PL 4-4960. E

APARTMENT, lower, 2-bedroom, unfurnished, near Century and Crenshaw, children O.K., $100. EX 6-6823, or EX 9-5587. E

HOUSE, 2-bedroom, unfurnished, can be leased, 2 children O.K., 4 miles from Hawthorne Plant, $70 month. MRS. CARTER, FR 4-7754. E

ROOM, man only, outside entrance, near Plant. OS 5-6458. E

APARTMENT, 1-bedroom, unfurnished duplex, newly decorated, garbage disposal. $75 mo.. Hawthorne. OS 5-2804.

HOUSE, 3-bedroom, near Northrop, fenced, garage, patio, stove, refrigerator and built-in dishwasher included, water paid $130 month. DA 9-5170. E

APARTMENT, unfurnished, 1-bedroom, garage, disposal, $65, near Plant 1, prefer working couple, avail. Aug. 30. OS 6-7860. E

RENTALS WANTED

CABIN or LODGE in vicinity of Lake Tahoe, must have accommodations for six people. T. R. SCHOTT, OR 1-0077. F

HOUSE, 1 bedroom, furnished, Manhattan Beach by Sept. 1. GEORGIA L. WARD, FR 9-8074. F

HOUSE, want to lease 2-bedroom, unfurnished, must have double garage, $85 maximum, no children. R. M. NIELSEN, OS 5-5425, after 6:00 p.m. F

APARTMENT, young couple, furnished, no children or pets, by September 1 in Northrop vicinity. WILLIAM CARRILLO, PL 1-3870. F

HOUSE OR APARTMENT, 2 or 3-bedroom, garage, near Northrop, have one girl, 13 years old, to $90. K. SUSTARSIC, DA 3-1409 after 5:30 or weekends.

CHILD CARE OFFERED

CHILD CARE, days or nights, licensed, near school, play yard, hot lunches. OS 6-6566. G

CHILD CARE, 3 to 11 yrs. fenced play yard, near school, days or nights, hot lunches, naps if desired. OS 5-7993. G

BOARDING HOME for boys up to age 8. OS 5-3739. G

CHILD CARE WANTED

CHILD CARE, lady to care for 5 year old daughter between hours 7-9 a.m. and 3-4:15 p.m. Prefer someone in Hawthorne. Start Sept. 4. Box 2505. H

CHILD CARE, sitter wanted for 5½ year and 1½ year boys, Lawndale, nights. Box 2507. H

LOST

RINGS, wedding band w/diamonds and engagement ring, Plant 3 cafeteria, July 9 or 16, liberal reward. GINNY, Box 2503. J

PERSONALS

URGENT, need witnesses to car accident last Jan. 19 at 1:20 a.m. between 1948 Chevrolet (green) and 1955 Ford (blue and white) in the Engineering parking lot. HO 4-7747 between 10-12 a.m. L

SPORTS

The Northrop News

SAILORS SET FINAL CRUISE

LABOR DAY CRUISE ENDS NRC BOAT CLUB SEASON

Aloha, sailors!

Aloha has a twofold meaning for NRC Boat Club members these days—. On one hand it is a pretty obvious way to remind all members of the Hawaiian Party and Luau planned on the beach at the Catalina Island Isthmus during the annual Labor Day cruise.

On the other hand it means good-bye to another season of sailing for the club. The Labor Day jaunt—to be held September 1, 2 and 3, will be the final island cruise of the club's boating year.

Limited accommodations at the Isthmus require that all Norcrafters who plan to participate in the cruise have their reservations in by August 17. Personnel Activities, extension 2784, has information on reservation procedure.

In addition to private boats, charter boat accommodations are available aboard the yacht Astrild, a 105-foot sloop.

Highlight of the 3-day trip will be the aforementioned Hawaiian party and Luau on Saturday night (bring your ukes, guitars and dress for the occasion, says Comish Cook) and a steak fry ("T" bones) and dance on Sunday night. Tab for this extravaganza is only $1.25 per person.

Alley Slate Set For NRC Bowl Season

A general firming up of details on the forthcoming NRC winter bowling leagues is now in process and entries are coming in for participation in all leagues.

Tuesday night leagues start September 11 and include—5 Man Handicap at the Imperial Bowl starting at 6:25 p.m.; 5 Man Scratch 800, Imperial, 6:25 p.m.; 5 Man Scratch 850, Windsor Bowl, 6:30; Mixed 5 Handicap, Inglewood Bowl, 6:30.

Wednesday night leagues have scheduled the Mixed 4 630 Scratch at Windsor Bowl starting September 12 at 6:30 p.m. and Engineering Men's Handicap at South Bay Bowl, September 5, 6:30.

Thursday leagues starting September 13 are Finance Mixed 5 Handicap, Windsor Bowl, 6:30 p.m. and Women's Handicap, Inglewood, 6:15 p.m.

Friday night it is a Mixed 5 Handicap at South Bay starting September 14 at 6:30 p.m.

Night shift bowlers will bowl as follows: Tuesdays, 11 a.m., 5-Man Scratch 825 Maximum, South Bay Bowl; Thursdays, 11 a.m., Trio Scratch 500, Imperial; Saturdays, 1:45 a.m., Mixed Foursome, South Bay; and Fridays, 1:45 a.m., Men's Trio Handicap, Machine Shop, South Bay. Entries still open.

KELPWORMS—. NRC Skin Diving club members are pictured during SCUBA (Self Contained Underwater Breathing Apparatus) training course. In front instructor Ed White, from left back; Bob Livingston, Jim Ellis, Jim French, Al Ordoins, Bill Sieber, Jerry Redmond, Jim Latham, and Walt Mullin. See story.

TOP BRASS—. New officers in rapidly growing Northrop day shift Toastmasters-212 club are pictured during installation ceremonies. Left: Jim Watson, publicity director; Joe Carver, administrative vice president; Tony Gayou, educational vice president; Doug Johnson, president; Henry Cooper, outgoing president and new area governor; Robert Bromley, installing officer and past area governor; Lorne Bristol, secretary; Will Tolles, treasurer. Club meets Thursdays at the Cockatoo—6:30 p.m.

Fishermen's Plight Is Poet's Song

While fishermen often call their activity "a wonderful sport," "recreation", "a he-man hobby", and "getting away from it all" these same fishermen's wives often term their spouses' fishing trips "sickness", "a fever", "plain foolishness", and "a good way of getting out of helping around the house".

In a fit of compassion for these souls, Ed Rodish, NRC Surf Fishing Club commissioner, contributed the following bit of poetry dedicated to the fisherman's family.

THE FISHERMAN

Who's the stranger, Mother dear?
Look. He knows us. Ain't he queer?
Hush, my own, don't talk so wild;
He's your father, dearest child.
He's my Father? No such thing!
Father died, 'way last spring
Father didn't die, you dub!
Father joined the Fishing Club.
Kiss him—he won't bite you, child
All those fishing guys look wild!

"However, says Comish Rodish, it isn't that way in the NRC Surf Fishing Club. Our clubs are designed for family participation and wives and children are invited to attend any of the field meets or business meetings.

Business meetings for the day shift club are held the first Tuesday of each month at 7:30 p.m. in the NRC Club house.

HAPPY MAN—. A long remembered vacation will be the recent trip by Lynn Jones, Manufacturing Production Planning, to Kalispell, Montana. Lynn caught the 15 pound Mackinaw trout he holds in Whitefish Lake there on a 30-pound test stainless steel line. This photograph appeared in The Inter Lake, Kalispell newspaper.

Annual NRC Golf Tourney Winner's Roster Announced

Following two days (July 22 and 29) of stiff competition on the Alondra Park golf greens, the annual NRC Open ended with the winners listed:

Reed Hays took the overall low gross title with 141 and Eugene Dieck shot for the overall low net honor and made it with a 127.

In the President's Flight it was Reed Hays again for low gross with 141 and Pete Lower (the NRC night shift golf comish) was low net man with 146-16—130.

Numbered flight winners were as follows:

First Flight: Vern DeCamp, Low Gross, 157; Eugene Dieck, Low Net, 151-24—127.

Second Flight: Lee Johnston (NRC day shift golf comish), Low Gross, 162; Don Riddle, Low Net, 161-30—131.

Third Flight: Don Jacobs, Low Gross, 169; K. L. Emberson, Low Net, 171-36—135.

Fourth Flight: Ed Peyronnin, Low Gross, 179; Bernie Lastowski, Low Net, 185-52—133.

The search for the most powerful drivers in the Open found Clyde Christofferson the best in the July 22 competition with a 340 yard hit and Ted Deguisne tops in the July 29 trial with a 300 yarder.

Another tournament is scheduled for October 7, according to Comish Johnston, and NRC Twilight League playoffs will begin during the first weeks in September.

SCUBA SCIENCES GIVE KELPWORMS DIVING FINESSE

A scientific approach to skin diving is being taken by several members of the NRC Skin Diving clubs.

The Kelpworms—official title of the NRC skin divers—recently attended a course in SCUBA (self contained underwater breathing apparatus) taught by Norcrafter Ed White, Los Angeles County underwater diving instructor.

The course covered diving physics, diving physiology, marine biology, currents and tides, and first aid. Much time was spent in an underwater classroom where the divers became familiar with diving equipment and its proper use. A trip to Catalina and a diving tour of the fabulous underwater gardens climaxed the course.

The clubs invite all Norcrafters to join them in this fast growing sport. The night shift club meets today at the NRC Clubhouse, 1 p.m., and the day shift club will meet on August 20, same place, at 7:30 p.m.

SADDLE PALS TO RIDE FOR RODEO

All those Norcrafters who plan to attend the gala annual Sheriff's Rodeo in the Los Angeles Coliseum on August 19 will see fellow Norcrafters in the grand entry parade.

The Northrop Saddle Pals—NRC Riding Club — will be among the many expert horsemen who participate in the colorful pageant which traditionally opens this annual event.

Tickets at Personnel Activities —Plant One.

SHARPSHOOTERS SQUARE OFF IN NRC GUN TRIALS

Shades of Wyatt Earp!

The NRC Gun Club will decide for certain just who is the sharpest shooter when they gather for a pistol shooting competition on August 23 at the Centinela Gun Range.

First shots will be fired at 7 p.m.

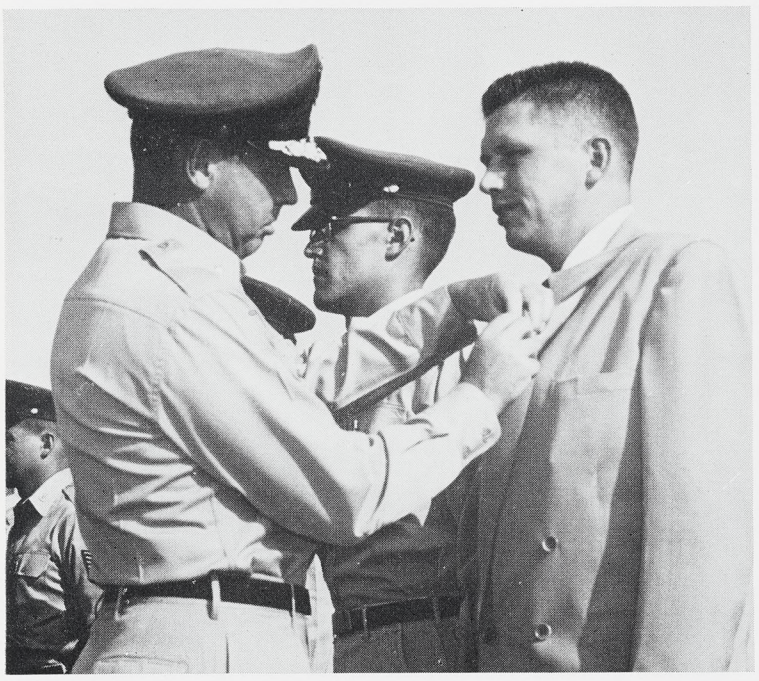
The competition will be scored on a 25-yard course in both center fire and rim fire classifications.

NRC awards will go to winners in both classifications.

All Norcrafters are invited to participate — whether presently attending Gun Club meetings or not.

The NRC day shift Gun Club meets the first and third Tuesdays of each month at 7:30 p.m. in the NRC Clubhouse.

Radioplane Hero



HEROIC—. William S. Fonda, right, Radioplane test engineer, receives U. S. Air Force Exceptional Civilian service award from Brigadier General J. S. Holtoner, commander of the AF Flight Test Center, Edwards AF Base, at formal military ceremony. Fonda risked life to save AF pilot from burning plane—braved explosion danger.

Mrs. Navy Candidate

WHILE FATHER'S AWAY—. Joyce Rogers, Public Relations Norcrafter, keeps happy home for sons, left: Steve, 5, and Mike, 7, while husband, Chuck, pursues Navy career. Joyce's part in aiding her husband's Navy job earned her semi-finalist rating in current contest to select Mrs. U. S. Navy from Navy careerists' wives. (Story Page 2.)

Auld Lang Syne

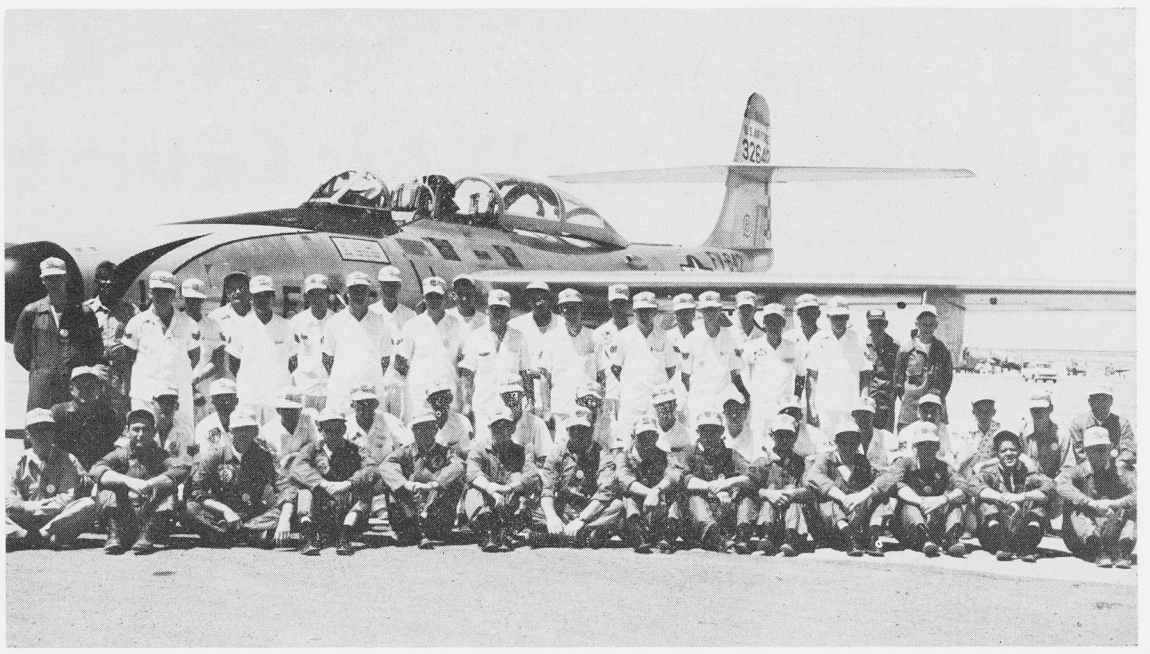


PHOTO FEATURE:

Northrop News Pictorial

GENERAL Lynn, WADF commanding, presents Colonel Edwin F. Carey, 414th Fighter Group CO, with trophy signaling victory for the Scorpion-equipped 437th FIS. Weather for the trials was perfect—temperature ranged from 100 to 114 degrees. Few maintenance problems on Scorpions were recorded. Tech rep assigned to station was Hank Waklee of Oxnard. Final firing will be held at Yuma, October 13 thru 18.

Oxnard Scorpions Will Shoot for WADF at Yuma

VICTORIOUS 437th FIS—. Boys from Oxnard (See Northrop News, May 23rd, 1956) will represent the WADF, 27th Air Division, at Yuma for world-wide Air Force rocket championship. Scorpion rocket teams and squadrons in addition to the WADF's 437th, will be from Northeast Air Command, Alaskan Air Command, and the Iceland Air Defense Force. Tests stress straight shooting, team training, ground support, Scorpion air hours.

FAREWELL—. Finance folk gather to bid farewell to Roland J. Pagen, retired Northrop vice president and treasurer (story appeared in August 1 issue of News). From left, front: George Forbes, Minnie Lauer, Roberta Alter, Jerry Zeleske, Teresa Siembab, Ruth Bodkin, Marie McCabe, Louise McCulloch, Roland J. Pagen, Frieda Mooring, Ruth Thomas, Clara Van Langen, Dolly Myhre, Kay Johnson, Miriam Pipkin. Center, left: Letha Petersen, Marion Key, Joe Muir. Back, left: Charles Cilley, Northrop treasurer; Tony Elliott, Hal Taylor, John Vlha, Irving Rassmussen, May Ward, Mr. Pagen's secretary; Lyle Ward, Lloyd Emerick, Al Eidsmoe, Bud Kinsey, Ben Curran. Pagen continues as Northrop member of board. He holds album containing best wishes signatures of all in division. He was also presented with an oil painting.

AIREPORTER FIRST:

Series Spotlights Vital Florida Missile Tests

Editor's note—. Stretching southeast across the Caribbean from the coast of Florida—and reaching near hailing range of Africa—are the sea test lanes of the Air Force's Missile Test Center, proving grounds for the Northrop Snark SM-62 and other U.S. defense missiles.

The test center—with its headquarters at Patrick AFB and its operational sinews at Cape Canaveral—has long been off-limits to newspapermen, curtained by a veil of military security.

Now, with Department of Defense approval, and with outstanding cooperation from the Air Force and civilian personnel at the Cape, the NEWS with this issue begins a three-part series, believed to be the most complete even written, on the base itself and on the launching and testing of an intercontinental guided missile.

Realizing that many California Norcrafters will be unable personally to visit the Florida scene—and at the same time to give proper recognition to the highly important Norcrafter community in Florida—the editor has divided the series in a manner which will best allow NEWS readers to "accompany" Aireporter on his journey.

First installment is devoted to the trip, to a description of the facilities in Florida, and to recounting various facets of life in Florida.

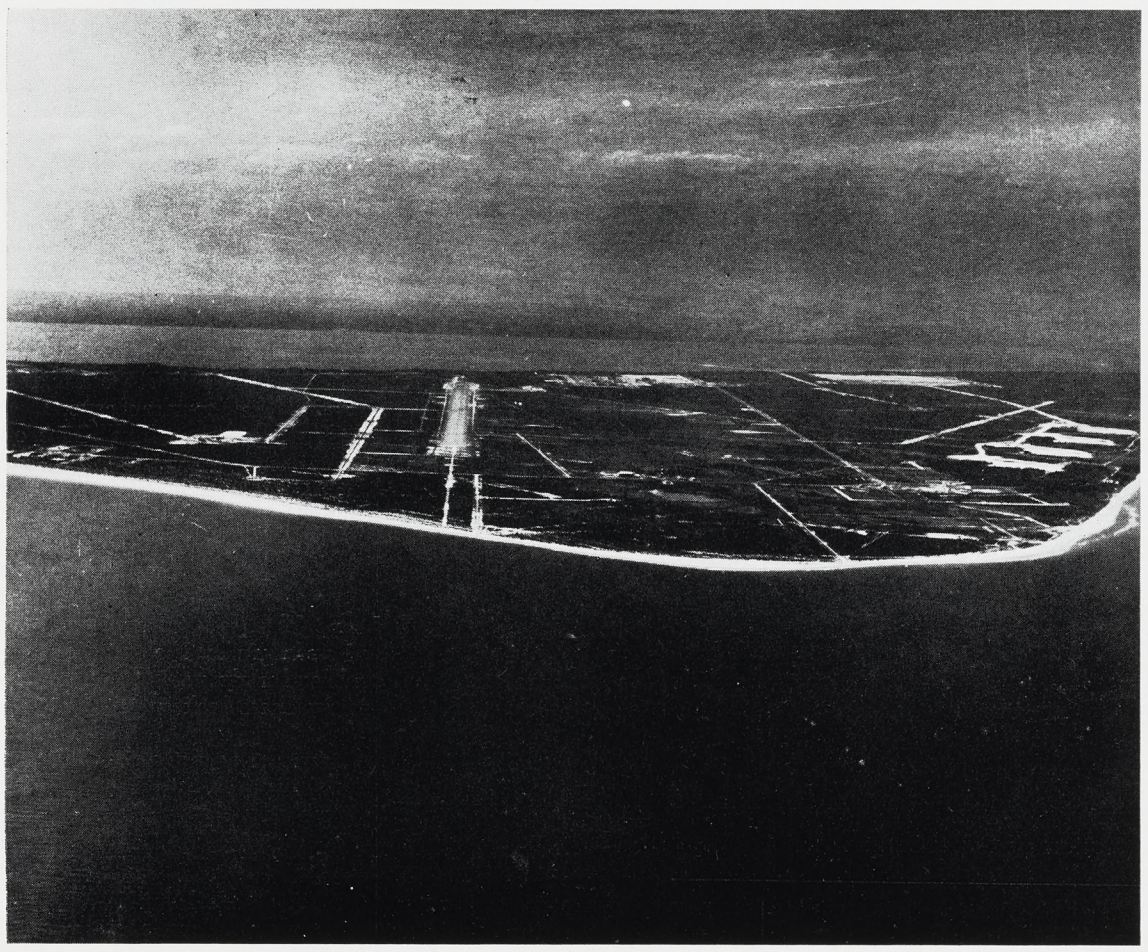
Second installment takes the reader through the gripping pre-launch countdown and the "shoot" itself.

And the third, and final, chapter describes two of the down range islands which are an integral part of the missile test facility.

The series is the latest in a string of Aireporter "firsts", which have included, in the past, stories about the radar "eyes" of the Black Widow, the first ride in twin-jet Scorpions, and others.

Northrop News
NORTHROP ®
Issued Every Two Weeks at Northrop Field, Hawthorne, Calif. Wednesday, August 29, 1956

Cape Canaveral—Missile Center



VIEW FROM OCEAN of Cape Canaveral's 12,000 acres, with Banana River in background. Skid strip for landing missiles is just left of center. Behind strip and to right is main building area. The launch pads are at lower right, just inland from point that juts into Atlantic. Patrick AFB, headquarters for AF missile test activities, is 18 miles south—to left of area shown, past swamps, dunes, on past Cocoa Beach.

Trainer Preview - - - General Boyd

TRAINER Development Engineering Inspection week before last drew 65 Air Force observers to Northrop, including Major General Albert Boyd, deputy commander, Weapons Systems, Headquarters ARDC, who is shown with Northrop President Whitley C. Collins and Chief Engineer Dr. William Ballhaus (left). Inspection took from the 15th to the 17th of August.

★ ★ ★

SNARK READY AND WAITING

LONG FLIGHT TO COCOA BEACH

The assignment was far from routine: to cover the launch of missile N3291 at Cape Canaveral, Florida.

"While you're down there," the man said, "go down range to a couple of the islands."

It sounded like a promise of another world. It was.

It began, really, with the drive to LAX. The ticket folder from Bill Key read routing to Melbourne, Florida, via Dallas, New Orleans, and Miami.

BY AIREPORTER

That is the easier way, and even on it, there is a wearying width of continent between Hawthorne, Calif., and Melbourne.

American Airlines took the airplane, a DC-7, to Dallas, where there was a short stop while Delta took over. The heat there was like the blast from an oven. There was another stop at New Orleans, for a change to National Airlines. The heat there was reminiscent of that of a shower room recently used.

There were other Northrop people besides Aireporter on board—Paul Jacobs and Chuck Davis were going to Florida, too—but there wasn't much chance for conversation. All three of us sat in line with the engines, facing the rear.

There wasn't much to see. Occasionally there were those soft, utterly white cumulus clouds. And there was the swamp country of Louisiana, and the confusing welter of rivers that end the legendary Mississippi—the Delta.

The engines do throb unceasingly when the passenger sits directly in line with them.

"Do they sound right to you?" the lady across asked. "Are they supposed to sound like that?"

You reassure her. Returning to Venezuela with her son, she has in her mind the picture of the recent Venezuelan airplane disaster. Her husband works for Shell Oil Co. Her little boy, about four, speaks only a scattering of English—he is fluent in the Spanish of his playmates.

The landing in Miami was a confused impression of many, many lights . . . and of no direction. Which way was north? It didn't matter. It had sprinkled rain sometime before landing. The runway was wet.

The flight started from LA at 10:50 a.m. It was now around 11 p.m., Eastern Standard Time, or 9 o'clock on the Pacific Coast. When the short cab ride gets a man to his hotel, he's glad—he's had plenty of traveling for one day.

At that it is easier than by the other route. Here we can spend the night, then catch the one

(See SNARK, page 2)

Snark Goes On Display To Public

For the second time since the Air Force lifted secrecy wraps, Northrop Snark will be put on display for public viewing.

Occasion for this second public appearance of the "bird" will be the annual National Aircraft Show to be held this year at Will

(See PUBLIC, page 3)

NORCRAFTERS TO HOLIDAY MONDAY

The last long week-end of the summer comes up this Friday, with the plants being closed next Monday—Labor Day.

In accordance with established custom, all hourly personnel not on leave of absence get eight hours' straight time pay for the day. Those requested to work get straight time plus holiday pay; any hourly Norcrafters on vacation on Labor Day receive an extra day's pay to compensate for the holiday.

Snark Waiting, Ready to Fly

(continued from page 1)

plane for Melbourne at 11:45 a.m. the next day.

More wearying than this is the route through Atlanta. On that one there is a change in Chicago, with perhaps a couple-hours wait. There is another one in Atlanta, and that may involve another wait. Then the feeder line to Melbourne, via several cities; or from Atlanta to Jacksonville, kill time there, and catch the Melbourne plane.

BUMPED AT TALLAHASSEE

Spud Monahan went to MTF by this route, carrying a bag of small parts needed that day for 3291. Somehow he was dumped at Tallahassee, but he made his way to Melbourne, regardless.

It's an hour and 15 minutes from Miami to Melbourne — about 165 miles. Eastern Airlines runs its Golden Falcon flight here; this is a feeder-type operation, with stops at West Palm Beach and Vero Beach before Melbourne.

The airplane flies along the coast, just offshore. The Indian River meanders along most of the way, paralleling the ocean. Occasionally, the sea breaks through to intrude upon the river.

Stops are brief. Many passengers don't bother getting out. Coming into Vero Beach, the airplane runs into rain again, the water leaving a stuttering trail down the windows like a roughly-sewed seam.

From the air again the land stretches flatly to west until it disappears in a haze. The shoreline is clean-looking sand, stretching to pale green shallow water. Out a little farther there are darker streaks, a lighter area, and then darker water again. The farthest area looks almost purple.

First glimpse of Melbourne is when the pilot banks sharply, Eastern Airlines style, and descends steeply to the airport. You get the impression of a lot of trees around the strip, and off in the distance a silver-painted water tower, which you will find later is your immediate destination, the Trade Winds Hotel.

Andy is there to meet Northrop personnel on board—Andy Anderson, assistant to Base Administrator Verl Smith. The Trade Winds Hotel Volkswagen bus is there, too—a friendly custom of the hostelry.

We drive past Melbourne's downtown section on a one-way street. It's not a large town — 24,000—so it doesn't take long to get past town, and on to the causeway that crosses the river, which is east of town.

Most of the causeway is land, but there are two stretches of bridge, and the rails are lined with people fishing. This is a great Florida pastime, and people are there at all times of day. Shrimp run here, someone says, and nobody can predict exactly when, "but when they do, the word gets around! Then you see the commotion when the folks all get out there with long-handled nets!"

DOHERTY'S DAUGHTER

Once past the causeway it's another small town with the fanciful name of Indialantic By the Sea. That's where the Trade Winds is, a fine looking, rambling, white structure, with stucco cottages under the evergreens to the south, and a swimming pool between. The water tower thrusts up right near the pool, and one time, it is said, one of Tom Doherty's little children climbed the whole 100-odd feet to the top. Her horrified father saw her there, climbed half-way up after her.

"Well" he says, "that was as far as I wanted to go—couldn't make it any farther if I tried, so I climbed back down. I hoped if she could get up, she could get down. She did."

Tom Doherty is the proprietor-manager of the Trade Winds. He is fast becoming a Northrop institution. Almost all Northrop "tourists", as the Florida base Norcrafters call visiting Hawthorne personnel, stay at the Trade Winds. They are beginning to know Tom's five children, who pop out from seemingly every bush and tree, and who can swim like fish, though they are all under seven.

Tom is the type who has fishing gear for the visiting fireman, or golf clubs, or even the use of his own car. (Although the base generally takes care of its own in the way of transportation.)

The "troops" take off from the hotel in the mornings early—the day begins at Missile Test Facility at 6:45 a.m. Most mornings the hotel desk's call seems far too early, but there isn't much choice—you're piling into a station wagon with four or five other guys, and starting time waits for no man . . . The summer mornings are great, though.

At the opposite end of the day, the night sky, from the Trade Winds, or from the ocean shore a few blocks away, is impressively crowded with stars. And they look closer and brighter, for the sky looks darker behind them. The night air is warm enough to enjoy a midnight swim.

There's an accompanying nuisance, though—mosquitoes. Sit at a drive-in theatre some night, and hear the snorting and snarling of a jeep. See it whizzing around the aisles, back and forth, until it covers the area. It will be belching behind it great clouds of mosquito repellent. Some of the drops fall on the windshield, and wiping only smears it.

It's exceedingly warm and humid in the summer in this section. You'll walk around in half a sweat most of the time. You might feel the effects of moving from air conditioned rooms into the hot blast of the sun, and vice versa. Sometimes it will make you sleepy . . .

By the time you leave you will become acquainted with a number of people, and with a number of places.

Most of our folks live in places like Melbourne, and Eau Gallie, and Cocoa. There are a number of older homes, two-storied, most of them painted white. The newer homes, one-story structures, resemble California homes. They, too, are painted in brighter colors.

The shrubbery around the homes is familiar. There is hibiscus, and heliotrope, and what looks like yellow bougainvillea. There are a lot of evergreen trees growing in the loose sandy soil. The latter is a grayish color, and the citizenry has a difficult time making grass grow.

The people who work on the birds are the same type of earnest and hard-working people as those who live in Hawthorne, or Lancaster, or Anaheim. Like Carl.

His house is an older one. The yard has many trees, including tangerine, grapefruit, mango, and palm. Carl is quite proud of the grapefruit, and is sorry it's not the right season so that you could enjoy one and determine for yourself how good it is.

"You should have seen the night blooming cereus," he also says, "when it was in flower. Beautiful."

His teen-age son and daughter are kidding each other . . . he's a growing boy and has downed about a quart of milk to wash down half a pie upon his return from National Guard drill.

They talk of youth activities in their church, and mother occasionally asks about some friend of theirs she hasn't seen for some time. They speak of hot rods, and how someone made a particularly noisy, gravel-scattering start from the front of the church on Sunday, and how the police caught up with him before he got two blocks away . . . And they chuckle about the appearance of a mutual friend in Bermuda shorts . . . They are 17 and 18, and like all seventeens and eighteens, they have a downhill pull on the world.

You note the warm affection that exists in this family, and are yourself warmed by it.

REDSTONE FIRED

There is not much strictly-shop talk, for the family has learned that security is to be respected. Carl does not volunteer information.

Security is tight in this area. But the people in the towns surrounding the Cape are always aware of Cape tests.

"I got home one day," a fellow said, "and my wife said, 'Redstone was fired today, wasn't it?'

"So I asked, 'What time?'

'4:52.'

" 'Must have been while I was coming home. How you know it was Redstone?'

" 'Well,' she said, 'there were dozens of Army cars going out there today. Any time there's an Army procession, something's doing with Redstone. And I could feel the roar!' "

LIGHTS IN THE DARK

Something else—and this despite the security, which people observe and honor even in the privacy of their homes:

The night before a launch there are stirrings in the towns around the Cape. Car doors slam to, engines start; cars stop at various houses to pick up their cargoes of people; kitchen lights wink on, then off; hushed goodbyes are heard echoing in the quiet streets from men with lunch-buckets in their hands; and the row of twin headlight beams heads for the Cape up A1A. The towns know then that something is brewing . . . you can't escape knowing . . .

To get to the Cape from Melbourne, ride along that same A1A, the Indian River on the left, the Atlantic on the right. (Before the Cape, however, the river forks, and the water on the left is the Banana River).

There are scattered homes along the route, and a few business establishments of various kinds. There is lots of palmetto.

"You have to plow up the stuff and burn it, or it takes over again," the Floridian says.

The Atlantic is bluer here on the ground than it appeared from the air. Nearer the Cape the river looks dull grey-green.

About 10 miles after leaving the Trade Winds, we begin to pass through Patrick Air Force Base. For the vet there is a touch of nostalgia in the sight of barracks buildings. (Why do so many bases look so hot and barren?)

NOT NORTHROP ALONE

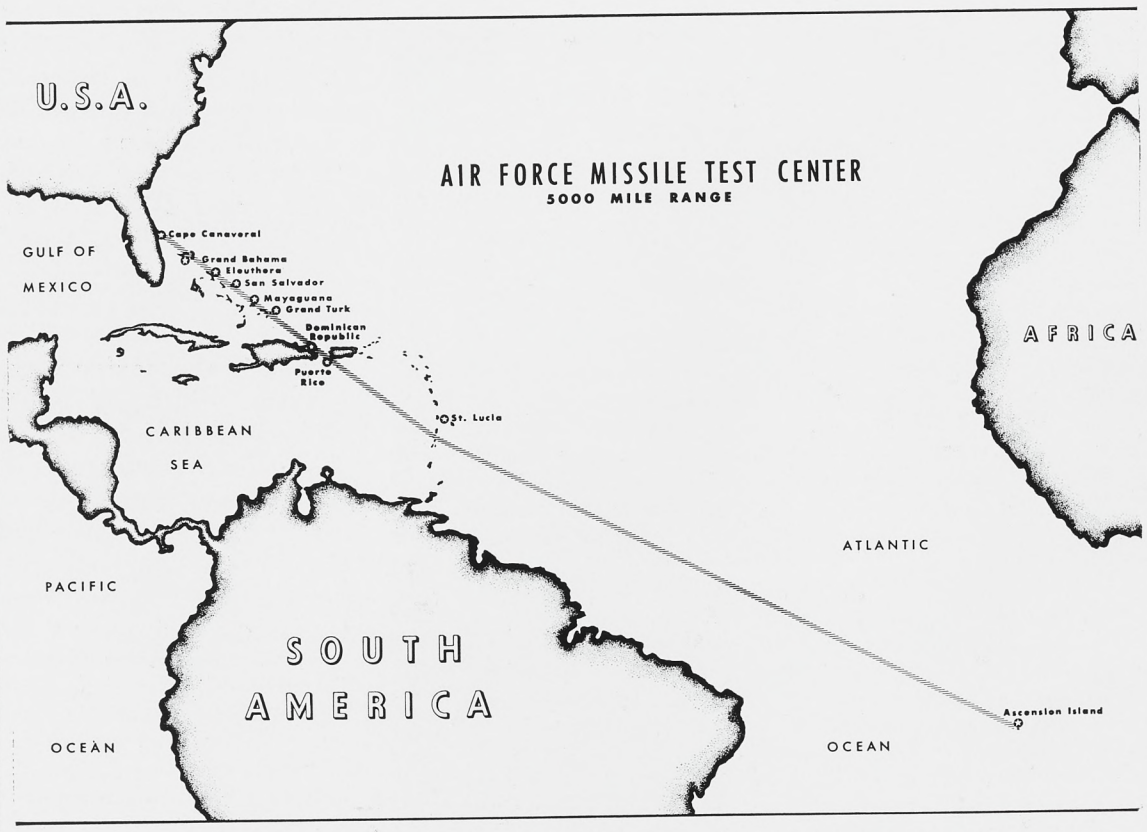
The initial impression dies quickly. This base is a model of tautness and an example of purpose. This is the headquarters of the Air Force Missile Test Center, under Major General Donald N. Yates.

The sweat, care, worry, and time involved in launching the Snark is not the province of Northrop personnel alone. Here, from Patrick, the logistical, technical, and administrative facilities bend every effort to the same end: successful flight.

It is an Air Research and Development Command function. Their mission: see that the US Air Force is equipped with the best planes, materials, fuels, weapons, and techniques that modern science can devise.

The mission governs every activity of the base. You see it reflected in many ways, even in the

(See SNARK, page 3)



MAP OF AREA shows relation of Cape Canaveral to down range stations.

AIREPORTER

Aireporter is a staff byline, used in the Northrop News for presenting stories of unusual interest to its readers. Aireporter is not always the same writer.

On this occasion Aireporter duties were handled by Harry Herranen, night editor of the News, who was assigned to cover the launching of missile 3291 last month.

His account of the scene and of the details surrounding the launching reflect credit upon the thousands of Norcrafters who are engaged in turning out weapons for the U. S., not only at the Florida test base, but also at our other facilities.

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CHARLES BRADFORD, Editor
HARRY HERRANEN, Assistant Editor (Nights)

A publication by and for the men and women of Northrop.
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News office phones—2456, 2457. Outside lines—OR 8-9111, OS 5-4611.

Scorpion Falcon Details

FOR FIRST TIME photo shows details of mighty wallop carried by F-89H Scorpion. Six Hughes Falcon missiles are carried—three in each pod—and are extended from sides of pods for firing. In addition, pods carry 21 2.75-inch air-to-air rockets each, installed in clusters of seven. Missiles, rockets can be fired selectively at the target.

Snark Waiting

(Continued from Page 2)

firm and businesslike way in which the Air Police guide traffic passing through.

At Patrick, too, are the headquarters of Pan-American World Airways, Inc., range functions, and of Radio Corporation of America sub-contract operations. PanAm and RCA operate the Cape Canaveral launching area and instrumentation stations down-range. PanAm guards security on the Cape, and guards it well.

A few miles north, along an evergreen-shaded portion of the road, appears the town of Cocoa Beach. It does not take long to get through town, and soon the country opens up again.

The road crosses a barren flat, and makes a giant horseshoe turn to avoid a shallow saucer of water. When it straightens out again, there, ahead, is a high barbed-wire fence, a gate with guards stopping traffic, and two small frame buildings. One is marked "Pass Section." The other is a guard shack where the cameras and weapons must be checked.

This is the entrance to Cape Canaveral Auxiliary Air Force Base. This is where Snark and other weapons that strain one's credulity are whetted to keen and usable edge.

POSE FOR PHOTO

You need a special pass to enter. You walk into the pass section office. Your card is on file, transmitted there by Plant Security of your home plant.

You step into a small photo booth, like those you see at fairs, or on midways. A young man snaps several shots. You wander around the small office while you wait for your badge.

Workmen come in and go out, arranging for passes, or asking for permanent badges. Young GIs come in, hat in hand, for camera clearance.

"You need serial numbers of all cameras," the supervisor of the pass section says.

"Sergeant's got 'em," GI replies.

"Please get them."

It's not long before you get your badge, signing for it. It has your picture in the center, and it looks like you, you must admit.

You get through the gate with no trouble, and you look ahead. The area looks almost harsh; perhaps appropriately harsh, because the weapons forged here are grim and purposeful ones. There are acres and acres of scrub brush, and not many trees.

The Cape, up to only a couple of years ago, was abundant with wildcats, deer, opossum, coon, armadillos, and snakes.

TRACKS SNARL

Scores of trucks of every description now snarl and churn by. There is almost feverish construction activity on the Cape. From reading the local papers you know that it is expanding tremendously.

Some hangars show in the foreground . . . then a more familiar sight—the checkered water tower that appears in Florida MTF photographs so often. A sign says that this is the industrial area of the Cape. A mock-up missile over it shows the type of work being done in the area. An arrow points right to the Northrop facility.

At the Northrop gate a courteous guard stops you. He asks to see your badge. He compares picture with person, carefully turns the badge over and feels it, then returns it to you. You proceed.

You ask your companions about the care he showed. There have been penetration checks, they tell you, by military and intelligence.

Then, dead ahead, two hangars and a smaller building between—Northrop in Florida. You enter Hangar "H" to see, first thing, a Snark, mounted high on a work stand.

She looks trim and ready, even in the confines of the hangar. This is not the one which will fly this time, but the sight of her makes you anxious to see the flight.

NEXT ISSUE

Aireporter describes preparation and countdown next issue. There are delays. The suspense mounts. Weather interferes. Then—at last all is in readiness. The Snark blasts off.

Read about actual Snark flight two weeks from today.

SHARE THE RIDE PROGRAM HELPS IN SMOG BATTLE

Norcrafter share-the-ride participants may congratulate themselves on assisting in the alleviation of the smog problem in the Los Angeles metropolitan area basin.

This statement is deducted from a recent suggestion to industry by Dr. Lauren B. Hitchcock, president of the Air Pollution Foundation, in which he stated that one of the best ways to help alleviate the smog problem in Los Angeles is by active participation in a share-the-ride program.

In a news release distributed last week, Dr. Hitchcock stated: "I cannot emphasize too strongly the need for share-the-ride programs during the 1956 smog season.

"Even the mere doubling of passengers in our to-and-from-the job autos—keeping even half of the present cars off the the road through the summer and fall months—can make a big reduction in the severity of smog."

It's The Beverly Hilton For October M-C Party

The high-powered annual dinner-dance of the Management Club will be held this year in the swank surroundings of the Bali Room, Beverly Hilton Hotel, MC President Ralph Hampton has announced.

Les Brown and his band will entertain at the occasion, which will be held on Saturday, October 13. Applications for table reservations have already been mailed, Hampton said.

Deadline for advance reservations, the prexy continued, is Friday, August 31. After that time reservations will be opened to non-members.

Tariff for the evening—including dinner, floor show, and dancing—is nine dollars per plate. Members who have not received applications at home may obtain them by calling Membership Chairman Al Rathbun, extension 2535.

The Management Club educational program, meanwhile, continues with a tour of the Los Angeles Pacific Telephone exchange on Saturday, September 8. Chairman of this activity is Ken Davidson.

Chairman Davidson reports that the tour is restricted to a number of 60, with the possibility of a second showing later if applications warrant. Reservations are made on a first-received, first-accepted basis.

Public to Meet Snark

(Continued from Page 1)

Rogers Field in Oklahoma City, Oklahoma, on September 1, 2, and 3.

(Coincidentally, the Department of Defense and the Air Force have released the Aireporter feature describing a launch of the Snark. The series begins in this issue, to be followed by two additional installments.)

Northrop products featured at the show, in addition to the Snark guided missile, will include a static display of an F-89H Scorpion, operational F-89s participating in daily simulated intercept maneuvers, and an exhibit booth highlighting primary products of Northrop, Radioplane and Northrop-Anaheim.

Northrop booth will also contain a motion picture screen for daily showings of the Northrop produced movie "Lethal Progress."

Prior to the show a large billboard sign was erected by Northrop adjacent to Will Rogers Field administration headquarters and facing the passenger terminal—see picture this page—publicizing Air Force participation in the show. The sign was erected as a public service to create interest in Air Force recruiting and to publicize the Snark.

SHOW HEADLINER—. William Coleman, sr., manager of Will Rogers Field, Oklahoma City, views Snark-bearing sign publicizing National Aircraft Show. Snark, dramatized by Aireporter in current series of articles, will be viewed by thousands at the show. (See story on this page.)

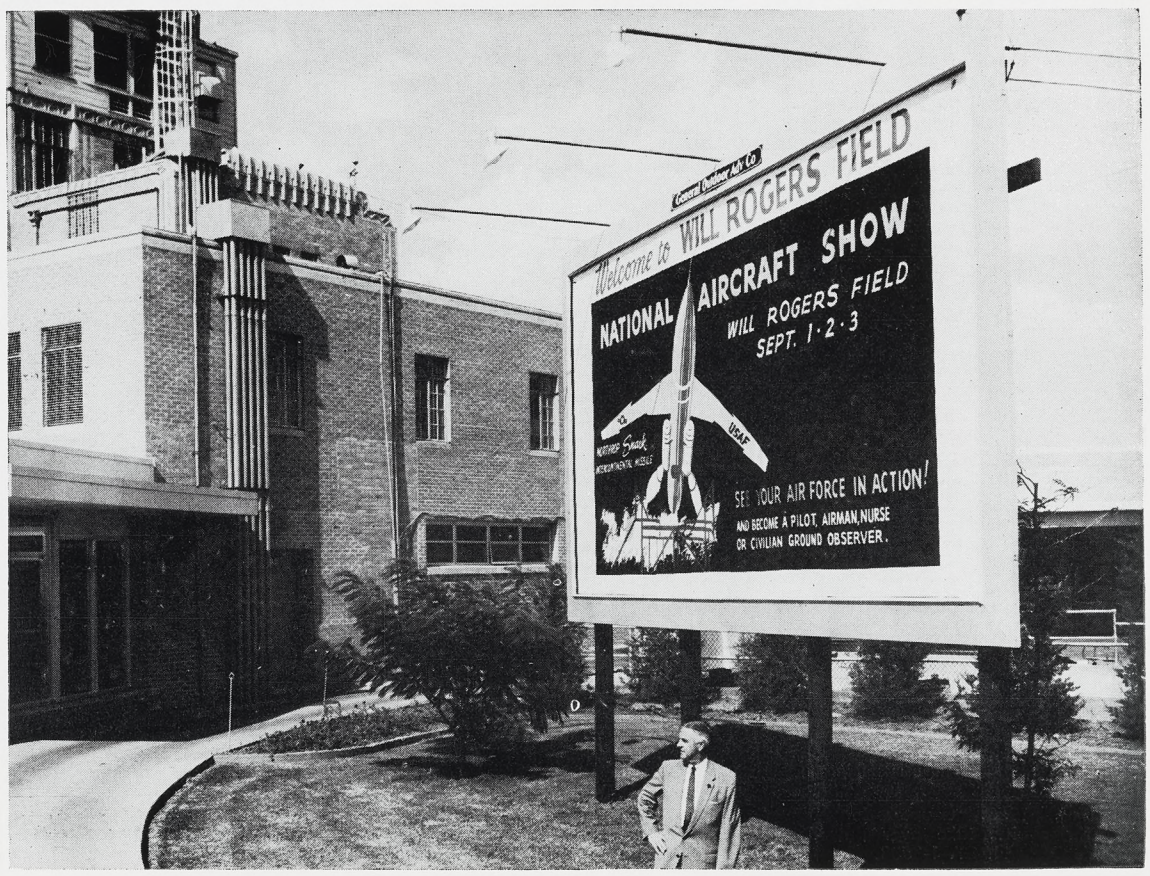
AIRPLANES TODAY LOWER IN COST, AIA REPORT SAYS

Many of today's complex military aircraft cost less per pound to produce than their simpler World War II predecessors, if inflation is discounted, the Aircraft Industries Association has reported.

The actual price of modern jet airplanes, the results of an AIA study showed, has increased many times over WWII series, and future aircraft will cost even more.

However, the AIA pointed out, constant improvement in management organization, utilization of labor, and employment of the latest production methods and equipment have made it possible for manufacturers to produce more airframe pounds per man-hour than during the war years.

Vigorous cost-reduction programs, such as those continuously in progress at Northrop, have tended to balance out complexity.



BBSF CLASSIFIEDS

BBSF classified ad service is provided free of charge to all Norcrafters.

Ads will be run one time only. If you wish the ad repeated, please fill out another form and forward to the Northrop News Office, Department 1320, Zone 65.

Box numbers will be provided to Norcrafters who do not have home phones or who do not wish calls. Replies to box numbers are to be in writing. Box number replies will be forwarded by the News Office without delay.

Ads for agencies, commercial enterprises and private businesses are not accepted.

Deadline is noon Wednesday one week before publication.

FOR SALE

CONSTRUCTION KITS, model, ships, control line planes, "O"-gage structures, all for $30; 50 doz. "O"-gage FISHPLATES, $2.50. Box 2607. A

RECEIVER, ARB 195 kc. through 9000 kc.; TG34 CODE KEYER; arc 5, 40 meter TRANSMITTER; 2 meter TRANSMITTER w/MD7 modulator; all band short wave RECEIVER, 6 meter converter. OR 2-7328. A

SODA FOUNTAIN, 8' Bobtail, with compressor; CASH REGISTER; MALT MIXERS. OS 6-2441. A

SLEEPING BAG, deluxe, plush lined SPORT COAT, hood and wool cap, used once, all for $30. Size 14 or 16. DA 9-2663. A

GAS RANGE, Gaffers & Sattler, $25. PL 5-0990. A

RANGE, Kenmore, 36", 4-burner, used 1 year, $95. J. N. SJURSEN, OR 1-7869. A

TAPE RECORDER, Wilcox Gay portable, one month old, $75. HAL SOLOMON, OR 8-9337. A

PARAKEETS, top quality, 3 months old, reasonable. OS 5-6272. A

GOLF IRONS, set, Springfield, 2 through 9 and putter. $25. WALTER E. HAMILTON, PL 6-4354. A

TRIUMPH, 1955, 200 cc, custom paint, $400; LAWNMOWER, electric, remote-controlled, $160. OR 2-1104. A

ENCYCLOPEDIA AMERICANA, 30 vols., custom case, 2 vol. dictionary, like new, $65. AX 5-2173. A

WEAPONS CARRIER, Army, Dodge, ¾ ton, 6 tires, 4 wheel drive. PL 1-5491, after 5:30 p.m. A

EASY CHAIR, upholstered, slip cover; 9'x12' rubber backed cotton RUG, $35. OS 6-5491. A

MOTORCYCLE, 1955 KH Harley-Davidson, terms if needed, $650. T. R. MILLS, OS 5-5231. A

PARAKEETS, 40, large aviary, nest boxes, $75. F. J. SAHLI, FR 5-8027. A

CAMERA, NICCA, 35mm, f:1.5 Cannon lens, 1/500 sec., coupled range finder, case, $150. JAMES P. WOOD, PL 3-7297, after 5 p.m. A

RIFLE, Mauser, 8 mm., sport stock, $60; Blackhawk garage FLOOR JACK, 1½ ton, $40. FR 7-1074. A

DRESSES, girl's jr. miss, size 10, reasonable. CARRIE BARBARA, NE 2-0640. A

OUTBOARD MOTORS, two 5.5 hp. Chris-Craft, used two seasons, $80 each. VERNON W. PAYNE, MEtcalf 3-9687, after 7:00 p.m. A

MOVIE CAMERA, 8 mm, DeJur, roll type. 1.9 lens. BETTY BOLTON, DA 9-7001. A

GENERATOR, Elco FM-TV sweep signal, model 360, wired, $25. P. AKIN, FR 5-9507. A

AERONCA, L-3, new windshield, L. F. xmtr.-rcvr., needs fabric. EX 7-1381, EX 7-1737 A

TRAILER, 2-wheel, 4'x7' oak bed with 4' sides, hitch, lights, $50. R. L. WOODWARD, FR 9-0591. A

RUG, reversible linen, 12'x11', pad, $32; mahogany BABY CRIB, non-allergy innerspring mattress, $24. DA 4-6748. A

SODA FOUNTAIN, large dual stainless steel, $100; Wyatt CREAM DISPENSER, $25; coke and root beer DISPENSERS free with above. OS 6-3142. A

STUDEBAKER, 1953 hardtop convertible, Commander; FORD, 1932 3-window coupe, '39 Mercury engine, $325. PL 2-2738, days. A

ERCOUPE, 1946, all metal, 85 hp., metal prop., 600 hr. TT A&E, 2-way LF, 2-way VHF. $1950. EX 8-6198. A

WATER HEATER, 20 gal., thermostatically controlled, automatic, gas. DA 3-0719. A

COMMUNICATOR II A, 6 meter, 12 V.D.C., 115 volt a.c., new condition. brochure. F. G. MILLER, DA 6-5953. A

FURNITURE, like new, kitchen, living room and 2 bedrooms, modern. Box 2606. A

BOAT, 14' molded plywood Fleetliner, remote control, 16 hp. outboard motor, trailer, clamp-on hitch, $450. FA 8-5128. A

SERVEL, 1950; green frieze DIVAN. OR 4-3465. A

RIFLE, deer, Winchester, model 70, 270 magnum, case and ammo. OS 5-3557. A

MOTOR SCOOTER, Corgi, type used by British paratroopers, 2 speeds forward, $65; SPEEDBOAT, 16' Mullens metal Riviera runabout, 45 hp. Lycoming marine engine, trailer, $500. Box 2605. A

CADILLAC, 1953, Coupe de Ville, $400 for equity, take over payments. K. N. ANDERSEN, GA 1-3508. A

FOR SALE

HOUSE TRAILER, 22', 1941 Plymouth, needs work, hot water tank, electric refrigerator, $150. OS 6-9274. A

BOILER, Steamaster, 3½ hp., 100 lbs. pressure, $150; 2 jacketed stainless steel KETTLES, 60 gals. and 80 gals., $25 each. DA 9-4065. A

MANGLE, Gladiron, $20. C. Y. CAPLAN, FR 9-8505. A

DINING ROOM SET, 8 pcs., mahogany, cost $450, $250 or offer; BABY FURNITURE, crib, dresser, playpen, high chair, car seat, etc. OR 8-8766. A

REFRIGERATOR, Coldspot, 9 cu. ft., 8 years old. $65. OS 5-8124. A

DINETTE SET, wrought iron, 4 chairs, $80; WASHING MACHINE, square aluminum tub, wringer type, $100; CEDAR CHEST, blonde, Lane, $40. PL 2-4347. A

HOUSE, 2 bedroom and den, brick patio, bbq., Westchester, OR 1-8397, evenings and weekends. A

VENETIAN BLINDS, one 54" high x 80" wide, one each for corner window 54" high x 66" wide, and one 54" high x 33" wide. PL 5-7310. A

VIEW CAMERA, lens, plate holders, camera size 6½x8½, takes 5x7 film, $35. PL 8-0374. A

SCREENS, wooden frame, 24"x36" and 36" x 54". $1.50; INTERIOR DOORS, $7.95 to $10.95. PL 5-7521, after 4 p.m. A

BABY CRIB, springs, mattress, $18.50; large 2-wheel TRAILER, hitch, tongue stand, 10'x12' tarpaulin, $39.50. Box 2603. A

CALIPERS, 1 pair Helio Vernier, with case, $8. R. A. BERKLEY, OS 5-9054. A

RADIO STATION, complete, ham, Viking 2 with VFO, microphone and stand, Hallicrafters SX-71 receiver, etc., $400 or offer. Box 2602. A

FORD, 1946 sedan, best offer over $150. THOMAS C. VIAN, NE 8-6471. A

STUDEBAKER, 1950 coupe, customized. EX 8-0500. A

WALL HEATER, single unit, 75,000 b.t.u., $25; table top kitchen RANGE, 4 burner $15. J. R. MELTON, OS 6-9518. A

REFRIGERATOR, 8', $100; O'Keefe & Merritt stove, $50; CRIB and MATTRESS, $5. D. STEPHENSON, FR 6-2719. A

TENT, 9'x9', used 2 weeks, $20. FRANK ABRUZZO, PL 2-3611. A

WOOD SHAPER, heavy duty, top 24"x 30", spindle, 1⅛, $225. TO 2-4041. A

SPEED GRAPHIC, 2¼x3¼, film pack adapter, $130; Kodak Hobbyist ENLARGER, 35mm to 2¼x3¼, $30. DA 6-2124. A

WASHER, Maytag, wringer type, $10. DA 6-2124.

PUP, German Shepherd, AKC reg., male, 4 months, $75, or offer. JAMES F. KASSEBAUM, FR 9-7154. A

CORVETTE, 1954, automatic transmission, $2000. GEORGE W. STEINMETZ, PL 3-6311. A

AQUA LUNG, 2-stage Cousteau-Gagnan regulator, $59.50. R. E. WALKER, EX 8-5201. A

MG, 1954, wire wheels, $1625. COMPTON, FR 5-3110. A

MERCURY, 1951, custom, $850. DA 4-6970. A

AUTOMATIC WASHER, Kenmore, bolt down, $45. W. P. TAUNTON, AX 1-2500. A

TV, "12", Motorola table model, $15. A. R. OSBORNE, FR 6-2269. A

PUP, Dachshund, 4 months old, AKC champion sired, $50. AL HERRING, OS 5-4994. A

HOUSE, new 3-bedroom, attached garage, w/w carpeting, Manhattan Beach, $11,500, $80 month, $1500 down. FRANK M. FONSECA, FR 9-2072. A

TWIN BEDS, his-and-her DRESSER, NIGHT STAND, $35. Box 2601. A

BOWLING SHOES, Oxford, size 9, $5. W. F. LE MASTER, OS 6-9579. A

CAR COOLER, never used, $6. B. E. RUNSWICK, OR 7-3514. A

DESOTO, 1950 club coupe, recent overhaul, $375; 3-cushion SOFA, 2 CHAIRS, rose, $100; BOX SPRING & MATTRESS, $15. FR 5-7441, before 4 p.m. A

RADIO-PHONO COMBINATION, Magnavox, console, three speed, mahogany, $75. E. MENSAK, AX 1-4848. A

DASH, Stewart-Warner, stainless steel, $50; Chevrolet ENGINE, 4-banger, never run, $50; CHEVROLET 6, PARTS, full cam, 2-pot manifold, tubular push rods, all $35; 1922 Dodge TRACTOR, $50. OS 6-8860 after 4 p.m. A

SAIL BOAT, 18' Malibu class outrigger, new this season, trailer, $625. E. F. MAC LEAN, FR 2-0524, or FR 2-3367 before 3:30 p.m. A

FOR SALE

HOUSE, near new, 3 bedroom, GI resale, near proposed South Bay shopping center, pink block wall, planters. FR 9-8518. A

MANTEL CLOCK, antique Seth Thomas, ebony finish, gold face, copper lion heads on sides, strikes hour and half hour, $35. EA 2-4747. A

MOTORCYCLE, Harley Davidson, "61" OHV, completely rebuilt, $225. Box 2608. A

HORSE, 11-year-old Tennessee walking mare, full gaited, 16½ hands high, not stable horse, private party only, $165, saddle and gear, $50. PL 6-4952. A

PUPPIES, toy fox terrier; CHICKENS, Banty, all kinds, silver spangled Hamburgs. DA 9-3936, evenings, weekends. A

GE UNIT, General Electric, sink, dish washer and disposal, all $50; Simplex ELECTRIC IRONER, $15. OR 7-4723. A

FURNITURE, stove, Western Holly, $25; breakfast set, Formica top, $15; small portable electronic piano, Wurlitzer, offer; 1956 Raytheon 17" TV, table model, $70; 2 arm chairs, leather upholstered, $5 ea.; Rollaway bed, mattress, $5; divan, $10; 2 table lamps, 50c each. Various other items, reasonable. EX 9-6158, 10 a.m. to 3 p.m. A

PERCOLATOR, electric Farberware, 8 cup, $7; RADIO, Stewart-Warner table model, $15; Summer DRESSES, size 14, black cocktail, full skirt, $15; blue and white cotton, $8; yellow linen suit, $10; evening SWEATER, pink cashmere, size 34, $10. PL 3-8758, Sunday only. A

PONTIAC, late 1949, 8 cyl. Hydra-Matic, all metal station wagon, $450. FR 2-0433. A

RUG, grey Wunda-Weave, 12'x15', pad, $75. OR 7-2212. A

GENERATOR, 4 cycle gas engine, 2500 W continuous duty, 110 V, 60 cycle, speed regulated, $250. FR 2-8605. A

AMPLIFIERS, Triad HF 10, 10 W, 6V6 output tubes; Triad HF 10, 20 W, 6L6 output tubes; each built-in preamp, volume, bass and treble controls, 10 watt, $35, 20 watt, $45. FR 9-5088. A

ACCORDION, 120 bass, $75. FR 5-5056. A

DEER RIFLE, 30.06 Remington, slide action, scope, case, $100; wraparound, heavy duty rear BUMPER, fits '55 and '56 GMC or Chevrolet pickup, $17.50. Box 2612. A

OUTBOARD, 16' Chris utility, glassed, forward steering, trailer, $465 cash, with 25 hp. 1953 Johnson, $645. OS 6-3319. A

FORD, convertible, Fordomatic, $1095. R. R. DODD, GL 4-2451. A

CURTAINS, Nylon criss-cross, 1 large and 1 small, $3.50; blonde mahogany coffee and end TABLES, $15; 10'x12' turquoise wool RUG, $45; 9x11 grey wool frieze RUG, $40; SERVICYCLE, needs repair, offer. FR 5-9320. A

MIXMASTER, excellent, $5. RE 5-8807. A

DODGE, 1952 Coronet 4-door, automatic shift, $600; 1949 Buick CAR RADIO, $15; Pontiac CAR RADIO, $10; RCA 17" TV, console, '52 model, offer over $25. Box 2610. A

HOUSE, early American decor, inside shutters, 2 bedrooms, den, separate dining room, Inglewood. OR 4-2183. A

CAMERA, 35mm, complete outfit including Tele-Photo lens and tripod. E. B. GUNTHER, OR 7-1401. A

AIR CONDITIONER, ½ ton RCA, used one month, $140. F. A. VAN SLYKE, OR 1-3552. A

TRANSMITTER, modified Stancor S-203A, 6146, $55; PE-103A, 500 v, 150 ma., 6-12 v, DYNAMOTOR, $25; Shure carbon MIKE and bracket, $5; as a unit, $55. PO 1-5422. A

BAR STOOLS, upholstered iron, 2, $15 ea.; upholstered DINING ROOM SET, mahogany, 5 pieces, $60. TE 2-9629. A

FREEZER, 22 cu. ft. upright, Carrier, cost $610, $200. CL 7-8626. A

SPEED BOAT, 18' V-8 Ford engine, mahogany planked and decked, windshield, water skis, trailer included, $650. TO 7-7593. A

HOUSE, 3 bedroom, 2 bath, 5 months old $750 down, Gardena. J. MORONEY, Box 2616. A

DINETTE TABLE, solid oak, 4 chairs, $35. FR 5-3914, after 7 p.m. A

REFRIGERATOR, Frigidaire, $35; COOK STOVE, $7.50. Box 2615. A

HOLLYWOOD BED, brown leatherette headboard, inner spring and box springs, $35. JOHN E. BOURKE, OR 2-8468. A

OLDSMOBILE, 1952 convertible Super "88", Hydra-Matic, $1075. FR 6-2903. A

HOUSE, 3 bedroom, w/w carpeting, double garage, fenced, unrestricted, Compton, GI resale, $11,950, $1900 down. NE 8-6629, after 6 p.m. A

RIFLE, 250-3000 Savage, $75; Cummings "Do-It-Yourself Shop", $35. F. N. EDMUNDS, FR 4-0688. A

MAGAZINES, 4 years of Popular Photography, from 1952 up to and including August 1956, also various chemicals and accessories. HO 4-7747, between 10-12 a.m., ask for Ralph. A

RIFLE, sport model, 31 caliber, bolt action Jap, $50; model 97 Winchester, lever action, $30. LAWRENCE HALLIBURTON, OR 1-1397. A

FOR SALE

MANIFOLD, dual intake, for flathead Ford 6, with carburetor, $25. Box 2614. A

KILN, ceramic, $35; 2 SHELVES, $5; 200 MOLDS, 5c to $1; GREENWARE, at ⅓ price, finished pieces, porcelain dolls, reasonable. FR 5-2493. A

MATTRESSES, twin sets and box springs, $12 for 2 pairs. R. G. ECKLES, OR 1-5046. A

RANGE, like new, late CP model, Gaffers & Sattler, $175; GE REFRIGERATOR, cross top freezer. $175. FR 9-3671. A

WANTED TO BUY

WASHING MACHINE, recent model, automatic, agitator type, and/or gas dryer, cash if reasonable, must be in good condition. JA 7-2352, after 1 p.m. B

FORD, 1929 Model A tudor, motor condition not important, reasonable. CHARLES WHITE, NE 5-9211. B

ARGUS C-4, must be in like new condition, accessories, etc., reasonable. ATlantic 7-0029, between 12 p.m. to 4 p.m. B

HIDE-A-BED, with good mattress, around $50. CHARLES M. BOAL, DA 9-6784. B

PARACHUTE HARNESS; TIMING LIGHT, bright kind. PL 4-4384. B

CAMERA, Speed-Graphic, 2¼x3¼ and accessories. E. B. GUNTHER, OR 7-1401. B

CIRCULAR SAW, 10"; HAND SAW or JIG SAW. Box 2609. B

DESERT LAND, should be on highway or near one. MIKE, TO 9-8937. B

FOR TRADE

MANGLE, Simplex console, trade for freezer. E. M. SKINNER, DA 6-0378. C

CAR TOP BOAT, oars, 85 lbs., all aluminum, slightly used, trade for aqua lung, regulator and bottles. L. DEVEAU, HE 4-0181. C

FOR SALE OR TRADE

BABY CRIB, mattress, teething rail, $25, or trade for used 8mm movie projector or car radio. FR 4-1773. M

HOUSE TRAILER, 14' aluminum, sleeps 2, $150, or trade for good transportation car. MAX STERN, DA 4-6748. M

BOAT, 11½', and trailer, glassed, $150, or trade for motorcycle. OR 1-4745. M

DINING TABLE, 4 chairs, $20; WARDROBE TRUNK, $10; BIRD CAGE, $1.50; full size SPRING and MATTRESS, $10. OS 6-6526. M

SAW, 8" tilting arbor, $35; ¾ hp. capacitor MOTOR, $30; 1941 CHEVROLET, sell or trade for ½-ton truck. OR 4-4032. M

WASHER, ABC deluxe automatic, $69; REFRIGERATOR, Crosley, 9 ft., $59; or trade plus cash for transportation car; INCINERATOR, $15. DA 9-7079. M

VIEW CAMERA, f:6.3; Varicon CONTACT PRINTER; Kenmore AUTOMATIC WASHER; Duncan-Phyfe chrome DINETTE SET; NCR BOOKKEEPING MACHINE; RCA 40-watt power AMPLIFIER; ¼ hp., 115 v. MOTOR; portable RADIO. Want reflex camera or darkroom equipment, or sell. DA 6-2467, evenings and weekends. M

FREE (To be given away)

ROCKS, large and small. PL 2-4923, before 4 p.m. D

PUP, 6 months old, part collie. Box 2604. D

CREDIT UNION

If you have two years' or more continuous Northrop service, you can finance auto purchases through the Northrop Credit Union . . . either new cars or used autos, 1951 models and later . . . Extension 617.

AUTO LOANS

RENTALS OFFERED

MOUNTAIN CABIN, Crestline, modern, weekly rates. A. R. OSBORNE, FR 6-2269. E

APARTMENT, unfurnished, 1 bedroom, garage, Hawthorne. A. D. STEVENSON, FA 8-4663. E

ROOM, furnished, for one, private home, garage, near Northrop. OS 5-9613. E

APARTMENT, 1 or 2 bedroom, adults, bachelor kitchen, newly decorated, utilities paid, no garage, $65 month. RE 4-4779. E

ROOM, furnished, private home, near Northrop. DA 3-0719. E

SLEEPING ROOM, man only, private entrance, near Plant I. $7 per week. G. FULTON, OS 6-7104. E

SLEEPING ROOM, private bath, private entrance, near plant, 2nd shift preferred, $12.50 week. C. G. KELLER, PL 5-3494. E

HOUSE, 1 bedroom, unfurnished or partly furnished, adults, $75 month, including utilities. PL 5-9371. E

ROOM, man only, prefer night shift worker, references exchanged, near Northrop, $9 week or $5 week and take care of yards. OS 6-7586, after 4:30 p.m., or Box 2613. E

APARTMENT, 1 bedroom, furnished, thermostat heat, garage, suitable for couple, no children, no pets, near Crenshaw and 63rd Sts., $65 per month. W. J. LAMOREY, OR 2-7746. E

ROOM, separate entrance, adjacent bath, garage storage available if desired, within walking distance of Northrop. OS 6-7777. E

ROOM, nice home, want male renter, $8 week. PL 4-3698. E

RENTALS WANTED

SHARE HOME, girl 23, working Plant III days, child 3½ years, share house or apartment and baby-sitting with girl, 1 child, working nights. DA 3-1409. F

HOUSE, 3 bedroom, man and wife and boy 13, girl 12. FR 9-6065, evenings or weekends. F

EFFICIENCY APARTMENT, private bath, single man. Box 2611. F

CHILD CARE OFFERED

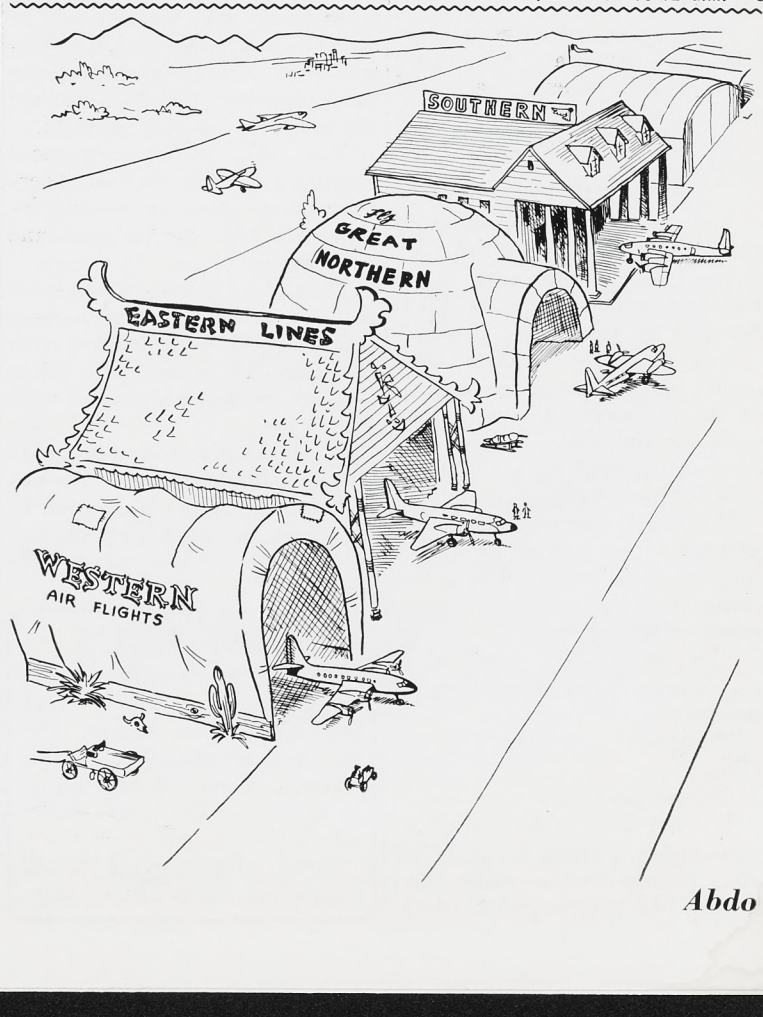
CHILD CARE, licensed, in my home, Torrance area. FA 8-4013. G

CHILD CARE WANTED

CHILD CARE, want woman to care for 3 small girls, or room and board in return for child care. FR 5-7704. H

PERSONALS

URGENT, need witnesses to car accident last Jan. 19 at 1:20 a.m. between 1948 Chevrolet (green) and 1955 Ford (blue and white) in the Engineering parking lot. HO 4-7747, between 10-12 a.m. L



SPORTS

The Northrop News

GOLF FILM TELLS HOW

BING CROSBY, BOB HOPE FEATURED

About a million dollars worth of golfing talent will be available free to Norcrafter golfers for an hour and a half on September 10.

Occasion will be three 30-minute sound and color movies on "The Best in Golf" to be presented at 7:30 p.m. in the NRC Clubhouse on the above date.

Jimmy Demaret will conduct the instruction with able assistance from golfing greats Nelson, Snead, Middlecoff and Thompson. Bing Crosby and Bob Hope will be thrown in for a few laughs.

In addition to priceless entertainment, the films will give invaluable instruction on proper grip, stance, swing and demonstrations of unusual and difficult shots that could be encountered in a round of golf.

The show will provide timely helps for golfers in the coming tournaments and current leagues and, with luck, greensmen should have their new techniques perfected for the holiday tourney traditionally scheduled during the Christmas vacation.

LITTLE LEAGUE ALL STARS DO FATHERS PROUD

Heading the category titled "Proud Fathers" are sires of the boys in the hot Sportsman Little League of Lennox.

The Lennox all-star team (chosen by managers from the league teams) competed for the first time this year in tournament competition. They beat all comers right up to the Regional playoffs—the last step before national competition.

The boys lost out in the final game of the Regionals to the Colton team 1-0. Colton is semi-finalist in the Nationals at Williamsport.

Norcrafters among these Lennox fathers include Bob Luxton, Construction, a team manager; Carl Lippon, Wage and Salary, umpire; Joe Schorley, Sheet Metal Fabrication, father of all-star left fielder Tommie; Fred Simmons, Maintenance, father of all-star third base coach Freddie.

Awards Set For Skin Dive Derby

Beginning skin divers will get the first crack at the residents of King Neptune's realm when the NRC Club has its annual Derby Dive on September 9.

The dive, to be held at Salt Creek near South Laguna Beach, will be divided into two classes—novice and derby.

Novice divers will take the plunge from 9:30 until 10:30 a.m. Derby divers will hit the water from 11 a.m. until 1 p.m.

NRC awards will be presented for the largest fish in each class—sharks and rays, however, count only one-half their weight.

Salt Creek is located two miles south of South Laguna Beach on Highway 101. "Look for the Salt Creek sign on the right of the highway; turn right," says day shift Commissioner Glen Combs.

Both day and night shift club members will be competing in the dive and all Norcrafter skin divers are invited. A special invitation is also extended to Norcrafter families.

Camera Folk Await Hawaii Pix

"Ten Days in Hawaii" will be the title of the United Airlines movie to be viewed by day shift Camera Club members and guests on September 5.

The meeting, which starts at 8 p.m. in the NRC Clubhouse Annex, will feature—in addition to the movie—Don Kohler, NRC Clubhouse manager, who will show color slides taken during his recent vacation in "The Islands".

Due to the increasing popularity of Hawaiian vacations, this meeting of the Camera Club is expected to draw a record crowd, according to club Comish Scott Budge, who stressed the fact that all Norcrafters, families and friends were welcome.

NRC Good Time Table for September

For enrollment or information on activities listed below, call or contact Personnel Activities, Plant One, 2784. All clubs meet at NRC Clubhouse unless otherwise noted.

ARCHERY, Nick Linardos
Meet every Wednesday, 7:30 p.m.

ART CLUB (days), Joe Kalina
Meet in Annex every Thursday evening, 7-10 p.m. Life class—models furnished.

BIBLE STUDY, Roy Stahl
Meet daily, Plant I, east mezzanine conference room, 11:15 a.m.; Plant II, Mon. and Thurs., Conference Room II; Plant III, meet daily 12:30, conference room 2, 2nd floor; Bldg. 8, Tues. 11:30, conference room.

BOAT CLUB, Ralph Cook
Meet first Wednesday of month. Next—September 5.

BOWLING (days) Lloyd Forstrom
Winter leagues now formed. Additional space open. Leagues start September 5, 11 and 13.

BOWLING (nights)
Leagues for Winter play now being formed.

BRIDGE CLUB, Tom Coates
Membership drive now on. All bridge players are welcome. Meet 2nd & 4th Tuesday of month, 7:30 p.m.

CAMERA CLUB (days), Scott Budge
Meet in Annex 1st & 3rd Wednesdays of month, 7:30 p.m. Dark room facilities and lighting equipment available to all members.

CAMERA CLUB (nights), Gene Beck
Meet 1st & 3rd Saturday of month, 7:30 p.m.

CHESS CLUB, Leonard Smith
Meet 3rd Wednesday of month, 7:30.

FISHING (day and night)
Register all fish for NRC awards with cards supplied by Personnel Activities.

GEM AND MINERAL CLUB, Elmer Storm
Meet 4th Wednesday of month, 7:30 p.m.

GOLF (days), Lee Johnston
Twilight League play-offs now in progress. Movie 10 September, 7:30 p.m.

GOLF (nights), Peter Lower
Partnership League 10 September at Alondra Park. Starting time 7:45 to 8:15 a.m. Entry fee $1.50. Deadline for entries—September 5.

GUN CLUB (days), Bob Kalkofen
Meet 1st and 3rd Tuesdays of month, 7:30 p.m. Next: September 4.

MIXED CHORUS, Bill Porter
Meet every Tuesday, 7:30 p.m. Music, robes and accompanist furnished. Alto and bass voices needed.

MODEL CRAFT CLUB
Meet first Monday of month, 7:30 p.m. For September only—meeting Thursday, September 6. Movies on growth of air travel.

PHILATELIC, George Borton
Meets 2nd and 4th Mondays of month, 7:30 p.m.

RADIO CLUB, Paul Serafin
Meet last Thursday of month, 7:30 p.m. Radio Code Class meets every Wednesday evening, 7:30 p.m.

SEA SCOUTS, Fred Wheeler
Meet every Tuesday evening, 7:30 p.m., Main Ballroom of Clubhouse.

SKATING CLUB (days), Evelyn Lester
Roller skating every Wednesday evening, 7:30 p.m., Redondo Skateland.

SKATING CLUB (nights), LeRoy Dick
Roller skating every Sunday evening, 7:30 p.m., Redondo Skateland.

SKEET CLUB, George Swanner
Meet every other Saturday at Long Beach Dominguez Gun Club on Artesia Blvd., at 10:30 a.m. Next meets: September 8 and 22.

SKIN DIVING (days), Glen Combs
Meet 3rd Monday of month at 7:30 p.m.

SKIN DIVING (nights)
Meet 3rd Wednesday of month, 1 p.m.

SOFTBALL (days), Dave Heaps
Black Bat tournament first of September.

SOFTBALL (nights), Dave Carney
Black Bat tournament first of September.

SPORTS CAR CLUB, Bill Hanna
Meet 2nd Thursday of month, 7:30 p.m.

SQUARE DANCING, Angie Allen
Meet at Swimm's Barn, 15016 Daphne St., Gardena, from 7:00 to 10:00 p.m., 1st, 2nd, 4th Sundays. Beginners class starts Sunday, September 16. Meet every Sunday afternoon 2:30 until 5 p.m., Swimms Barn.

SURF FISHING (days), Ed Rodish
Meet first Tuesday of month, 7:30 p.m.

TOASTMASTERS (days), Doug Johnson
Meet every Thursday evening, 6:30 p.m., "The Cockatoo".

TOASTMASTERS (nights), Sam Grutsis
Meet every Thursday, 12:30 p.m., at Bill's Steakhouse on Crenshaw Blvd.

TROPICAL FISH CLUB, Ronald Wiggins
Meet last Tuesday of month, 7:30 p.m.

EXCLUSIVELY FOR THE LADIES

BOWLING, Lee Hopkins
Winter women's and mixed leagues now forming.

KNITTING, Thelma Martin
Meet every Monday evening, 7:30 p.m. Craft Room, NRC Clubhouse.

SENIOR GIRL SCOUT TROOP (Mariners) May Hawkins
Meet every Tuesday, 7:30 p.m. Scout Cabin, 135 Grevillea, Hawthorne.

TOASTMISTRESS,
Meet in NRC Clubhouse Board Room 1st & 3rd Thursdays, 7 p.m.

NORCRAFTER ARCHERS AQUIVER WITH PLANS FOR CLUB PROGRAM

Outstanding was the word for attendance at the first meeting of the reactivated NRC Archery Club last month. (See picture on page 6.)

Since that first meeting—where it was decided that the club would meet every Wednesday night at the NRC Clubhouse—the attendance has remained at a steady high peak.

Present project for the club is the establishment of scores in order to determine competition classes. Inasmuch as most of the members are at present shooting bare bow, the first classes will be in this category. Breakdown will be in novice, bowman and archer classes.

All interested archers may establish scores for a class by shooting three nights out of a month to determine averages.

DISTAFF LINE-UP—. Following final game in the NRC Ladies' Softball season, gals lined up for portrait. From left: Jennie Valadez, Theresa Pitiak, Besse Gherna, Mary Kaleta, Pam Thompson, comish; Donna Banning, coach; La Vaughn Kirk, Ann Welsch. Not in pic: Norma Clarke, Evelyn Walton, Gini Musselman, Della Hamley.

RIDES WANTED

7:00 a.m. — 3:45 p.m.

(Zone 9)
COMPTON & PRAIRIE, Hawthorne. BETTY CAUSER (5130-45060, Ext. 2521), OS 5-6747. 2-9

(Zone 10)
PRAIRIE & 132ND ST., Hawthorne. PAUL W. HAMILTON (5130-45121, Ext. 2667). 2-10

(Zone 10)
REDONDO AVE. & RUHLAND AVE., Manhattan Beach. (Will take ride from Plant 1 or Plant 4.) CAROL NOLEN (5561-21357, Ext. 4280), FR 4-4779. 2-10

(Zone 12)
IMPERIAL & INGLEWOOD AVE., or 111th and Inglewood Ave., Inglewood. KAYE LAVOISE (5507-19338, Ext. 526), OR 1-3835. 2-12

7:30 a.m. — 4:15 p.m.

(Zone 1)
SUNSET BLVD. & ALVARADO ST., Los Angeles. (Anyone on or reasonably near this route: Coronado St. to Hollywood Fwy., to Harbor Fwy., 42nd to Hoover St., El Segundo Blvd. to Crenshaw Blvd. and Plant III. Car pool considered.) FERNANDO ALMANZA (3554-44941, Ext. 1522, 1523). 3-1

CRENSHAW BLVD. & 81ST STREET, Inglewood. LEE MASSEY (5120-14338, Ext. 713). PL 3-6217. 3-1

(Zone 5)
ROSECRANS & VERMONT, Gardena. JOY PRUITT (8400-12174, Ext. 2671). DA 9-3653. 3-5

(Zone 9)
PACIFIC COAST HIGHWAY & CALLE MAYOR, Torrance. LOIS CHARLES (5210-33472, Ext. 1457, 1960). 3-9

PRAIRIE & 162ND, Lawndale. (Want ride home only.) ANN THOMASON (1500-45084, Ext. 1656). 3-9

PRAIRIE & 174TH STREET (ARTESIA), Torrance. JUNE TAMURA (4600-45086, Ext. 1893), DA 4-0536. 3-9

MANHATTAN BEACH. (Car pool desired.) HERBERT MISSLER (3600-44801, Ext. 1428). 3-10

PROSPECT AVE. & 6TH ST., Hermosa Beach. DOROTHY LANE (5100-14323, Ext. 1623). FR 4-2782. 3-10

HERRIN & FIRST, Manhattan Beach. ELIZABETH A. JAMES (5508-19766, Ext. 2515). 3-10

ROSECRANS & SEPULVEDA, Manhattan Beach. (Interested in car pool.) DON SHERMAN (5140-15764, Ext. 2002), FR 41773. 3-10

RIDES WANTED

7:30 a.m. — 4:15 p.m.

(Zone 12)
IMPERIAL & HAWTHORNE, Lennox. LORETTO THORNTON (8620-44298, Ext. 2629). 3-12

8:00 a.m. — 4:45 p.m.

HIGHWAY 39, Buena Park. (North end of Buena Park, 7:30 ride would be fine.) MERRIJO PROCTOR (Ordnance, Anaheim, Ext. 274), LAwrence 2-2706. 5-5

4:45 p.m. — 1:15 a.m.

(Zone 10)
INGLEWOOD AVE. & 142ND ST., Hawthorne. PEARL BAKER (5353-38, Ext. 1686), OS 6-6021. 8-10

Miscellaneous — (Split Shift)

(Zone 9)
HAWTHORNE & 101, Torrance. (Car pool considered. Mariposa. Hours: 7:15 a.m. to 4 p.m.) SHIRLEE FITZGERALD (6100-45034H, Ext. 401), DA 6-3731. 10-9

RIDES OFFERED

7:30 a.m. — 4:15 p.m.

SUNSET BLVD. & ALVARADO ST., Los Angeles. (Anyone on or reasonably near this route: Coronado St. to Hollywood Fwy., to Harbor Fwy., 42nd to Hoover St., El Segundo Blvd. to Crenshaw Blvd. and Plant III. Car pool considered.) FERNANDO ALMANZA (3554-44941, Ext. 1522, 1523). 13-1

(Zone 7)
FIGUEROA & 215TH, Torrance. (Route: 215th, Figueroa & El Segundo to Plant 3. Car pool considered.) N. K. YOUNG (3730-44811, Ext. 2351), FA 8-8903. 13-7

MANHATTAN BEACH. (Car pool desired.) HERBERT MISSLER (3600-44801, Ext. 1428). 13-10

4:45 p.m. — 1:15 a.m.

(Zone 1)
SANTA BARBARA & WESTERN AVE., Los Angeles. (Take one rider; must be west of Western Ave. Phone noon at home between 12 and 1 o'clock only.) P. F. WALLMAN (5622-21446), AX 3-2670. 18-1

Miscellaneous — (Split Shift)

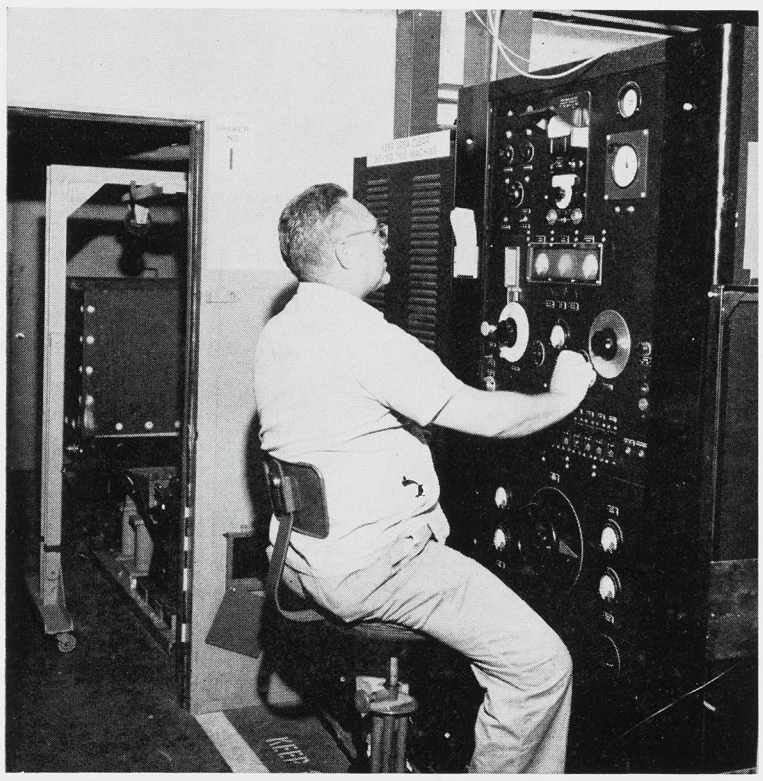
(Zone 1)
FLORENCE AVE. & CRENSHAW BLVD., Los Angeles. (Mariposa. Hours: 7:15 a.m. to 4 p.m.) CHARLOTTE WOOLUMS (9320-27690, Ext. 487 or 488), PL 3-7484. 20-1

PHOTO FEATURE:

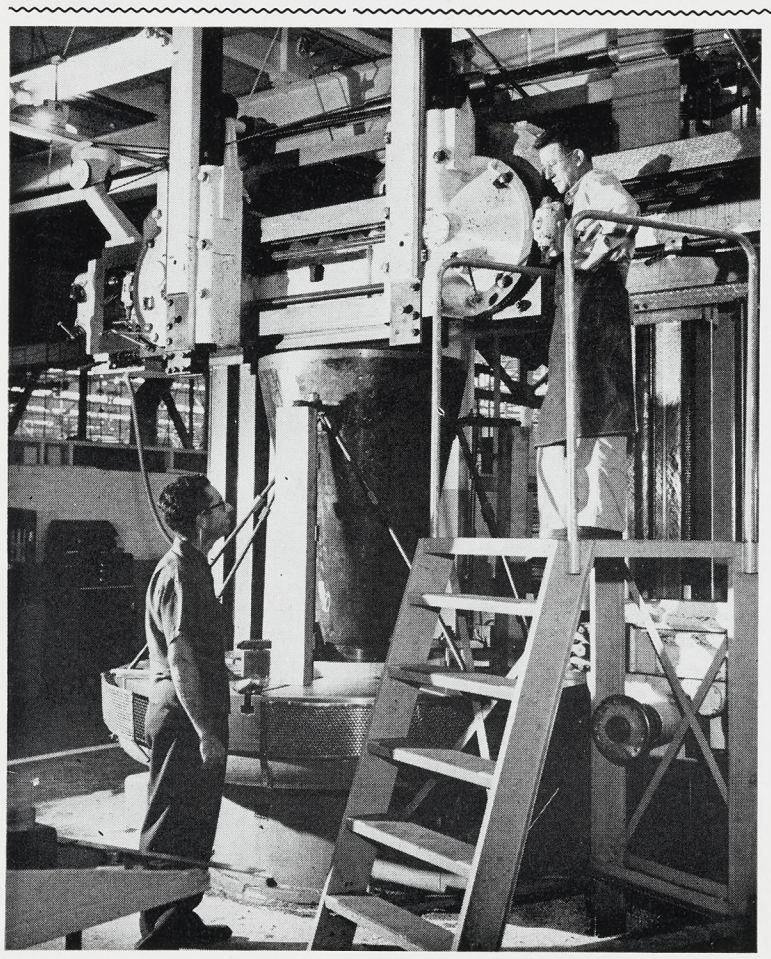
Northrop News Pictorial

Hastings Not Like This—!

BOWS AND GIRLS—. Among enthusiastic members of new NRC Archery Club are these attractive archers, from left: June Fleurichamp, Lou Mitchell, Ann Baker, Dot Marchell, Dolores Ello, Carol Fickas. Girls also are almost all members of South Bay Archery club, and each one is expert with bow. New club has drawn high membership since first meeting—see story page 5—and big plans are in offing for monthly roving meets, contests. Engineering Norcrafter Nick Linardos is club commissioner.



VARIETY of demanding tests prove missile parts before they become part of Snark. In Development and Testing Lab. F. L. Sutherlin is shown as he controls vibration test of switch assembly in equipment visible in background. Flight conditions are simulated under extreme temperatures to get vital results.

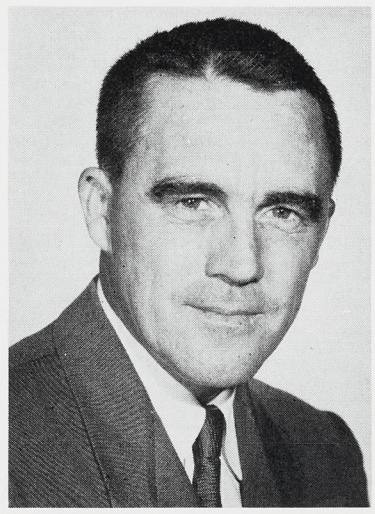


UNIQUE operation in Machine Shop recently required use of brace rods to hold piece of tank tooling in place for work. Leadman Euel Mills, foreground, and Operator Ray Kistner set up job, which utilizes almost entire height capacity of Cincinnati Hypro vertical boring mill. Conical shape of piece made bracing necessary, since wider diameter had to be on top. Two inches of stock came off top, and step counter bore was cut into inside diameter. This was first operation of its kind.

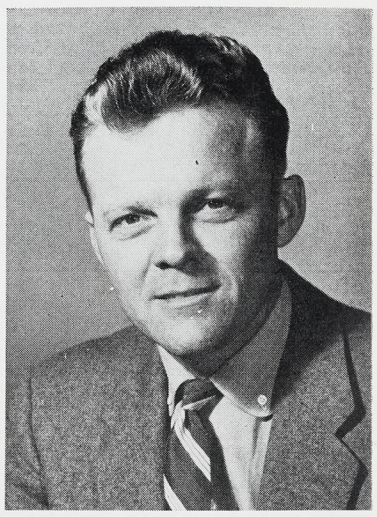
Life of Party

INTENSE AUDITORY IMPRESSION—. Recent Management Club search for wearer of loudest sport shirt at August MC meet won highest applause meter readings for Paul Von Essen, third place; Glenn Brannum, first; and Walter F. Black, second. Waving hand in back belongs to night shift MC Vice-president Carl Liedtke. Brannum won prize — a subdued sport shirt. (For Hilton Hotel story and details of annual MC dinner-dance, see page 3.)

New Scorpion Pilots



ROBERT L. PERRY is one of two new Engineering test pilots assigned to Northrop-Radioplane flight test facility, Holloman Air Development Center, Alamogordo, New Mexico. Perry has 15 year's experience as a pilot.



WILLARD D. LANDSTROM, new Engineering test pilot at Northrop - Radioplane flight test facility in Alamogordo, is former B-47 command pilot who attained major's rank during 9 years' service in Air Force.

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